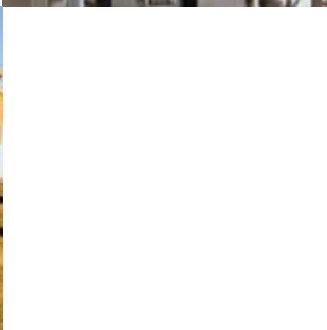




Vehicle Service Equipment Buyer's Guide

Fluid Handling Equipment for Industrial and Commercial Applications



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

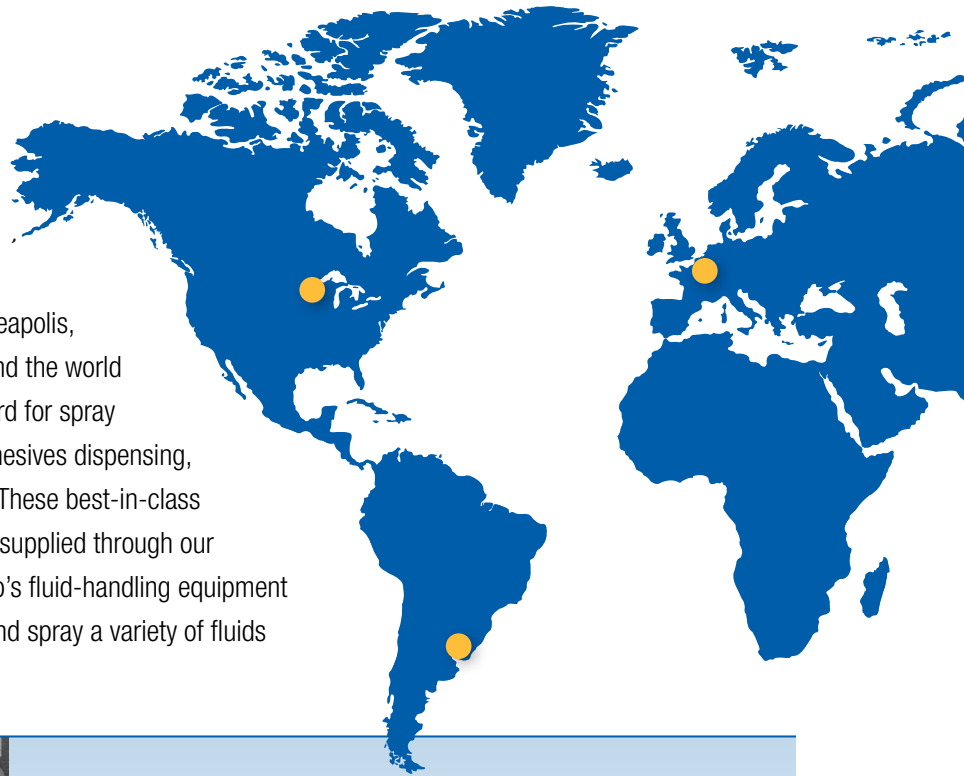
PROVEN QUALITY. LEADING TECHNOLOGY.

Table of Contents

	Page		Page
About Graco	4-6	▶ Diesel Exhaust Fluid (DEF) Systems	
Graco Resources	6	How to Choose Your Graco DEF Solution	162
▶ Fluid Management Systems		LD Blue Electric Pumps and Packages	163-165
Fluid Management System Selection Guide	9	SD Blue AODD Pumps and Packages	166-168
Benefits of Pulse™ Pro Fluid Management	10	LD Blue Manual Pumps	169
Steps to Build Your Pulse Pro System	11	DEF Meters	170-171
Pulse Hub	12-13	DEF Dispense Nozzles	172-173
Pulse Dispense Meter	14-15	DEF Hose Reels	174
Pulse Tank Level Monitor (TLM)	16	DEF System Accessories	175-179
Pulse Pump Air Control (PAC)	17	▶ Specialty Pumps	
Pulse Extender and Remote Extender	18	Diaphragm Pump Selector	182
Pulse Packages and Accessories	19	Husky 1050 AODD Pump	183-184
Steps to Build Your Pulse FC System	20	Husky 307 AODD Pump	185
Pulse FC Software	21	Husky 515 AODD Pump	186
Pulse FC Starter Kit	22	Husky 716 AODD Pump	187
SD™ Preset Dispense Meters	23-24	Husky 1590 AODD Pump	188
Pulse FC Packages and Accessories	25	Husky 2150 AODD Pump	189
Traditional Box – Wired Fluid Control Components	26	Husky 3300 AODD Pump	190
▶ Oil Pumps		Diaphragm Pump Packages	191-192
Oil Pump Selection Guide	28-29	Diaphragm Pump Accessories	193-194
LD Series™ Oil Pumps	30-45	Undercoating and Rustproofing Pumps	195-196
LD Series™ Oil Pump Accessories	46-47	Undercoating and Rustproofing Pump Packages	197-198
Mini Fire-Ball® 225 Oil Pumps	48-51	Undercoating and Rustproofing Accessories	199
Fire-Ball® 300 Oil Pumps	52-56	Bulldog® 43:1 Oil Pump	200-201
Fire-Ball® 425 Oil Pumps	57-60	Fast-Flo® 1:1 Pumps	202-203
Fast-Ball® Oil Pumps	61-62	Fast-Flo 1:1 Pump Accessories	204-205
Oil Pump Accessories	63-68	APEX™ and APEX On-Demand	206-209
NXT™ High-Flo® Oil Pumps	69-71	Piston Hand Pumps	210
NXT Dura-Flo® Oil Pumps	72-75	▶ Hose and Cord Reels	
Dyna-Star® Hydraulic Oil Pumps	76-77	Hose Reel Selection Guide	212
Power-Star™ Hydraulic Oil Pumps	78-79	LD™ Series Enclosed Hose Reels	214-216
Manually Operated Oil Pumps	80-81	SD™ Series Hose Reels	217-223
▶ Oil Meters		SD™ Series Cord and Light Reels	224-227
Graco Dispense Meters	84	XD™ Series 10/20 Hose Reels	228-233
LDP5 Electronic Preset Meters	85-87	XD™ Series 30 Hose Reels	234-238
EM® Series Electronic Meters	88-90	XD™ Series 40/50 Hose Reels	239-244
SD Series™ Electronic Meters	91-93	XD™ Series 60/70/80 Powered Hose Reels	246-257
IM5 In-Line Electronic Meter	94	▶ Fluid Reclaim Equipment	
IM20 In-Line Electronic Meter	95	Oil King™	260
SDI15 In-Line Electronic Meter	96	Coolant King™	261
Mechanical Meters	97-99	Oil Ace™	262-264
SDV15 Control Valve	100-101	16-Gallon Mobile Receiver	265
XDV20 Control Valve	102-103	Big Hauler™ Truck Drain	265
Dispense Consoles	104-105	Track Receivers	266
▶ Grease Pumps		Diaphragm Evacuation Pumps	267
Grease Pump Selection Guide	108-109	Evacuation Pump Packages	268-270
LD Series™ Grease Pumps	110-114	Fluid Reclaim Accessories	271-273
LD Series™ Grease Pump Accessories	115-116	▶ Accessories	
Mini Fire-Ball® 225 Grease Pumps	117-120	Air Regulators and Valves	276
Fire-Ball® 300 Grease Pumps	121-128	Air Valves	277
Fire-Ball® 425 Grease Pumps	129-135	Hose Fittings	278
Grease Pump Accessories	136-139	Lubrication Hoses	279
GT 750 36:1 Grease Pumps	140-141	Air/Water Hoses	280
NXT™ Check-Mate® Grease Pumps	142-146	Quick Connect Fittings	281
Dyna-Star® Hydraulic Grease Pumps	147-148	Adapters and Fittings	282-283
Viscount® II Grease Pumps	149-150	▶ Warranty Information	284-286
Manually-Operated Grease Pumps	151	▶ Index	287-294
▶ Grease Dispense Valves and Guns			
Dispense Valve and Gun Selection Guide	152		
Accu Shot™ Metered Grease Valve	153		
Pro Shot™ Non-Metered Valve	154		
Power Shot™ Booster Valve	155		
Heavy-Duty Grease Guns	156		
Accessories	157-159		

About Graco

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



Lubrication Equipment Division

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

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



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

When it comes to **research and development**, Graco is one step ahead, ensuring we offer the best possible solutions. To guarantee superior quality and to meet the changing requirements of your markets, we prioritize investing resources in research and development. Innovative technologies and extensive field testing are a natural part of our process to develop new products. Also, every aspect of our production is subject to constant testing and evaluation. It's the foundation to deliver products with long service life and low cost of ownership. The insurance to help you grow your business.



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

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

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

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

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

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

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



Did You Know?

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



Keep your equipment running at peak performance. Graco automatic lubrication solutions give you the ultimate machine performance by lubricating key wear points – the right amount of lubricant, at the right time, in the right location. Graco has automatic lubrication solutions for the industrial, on-road mobile, off-road mobile, energy industries and more.



Visit www.graco.com/autolube

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

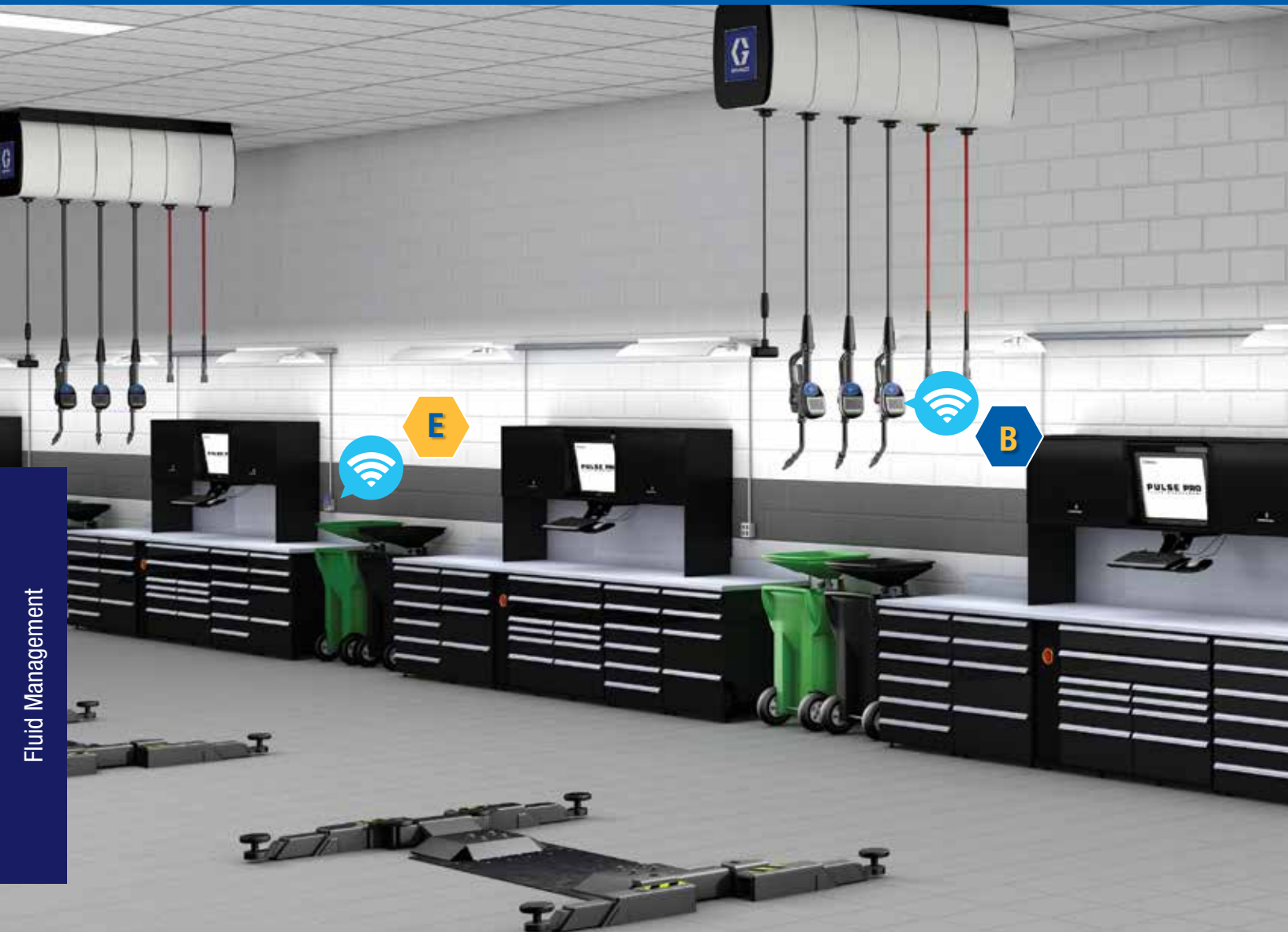
	Page
Fluid Management System Selection Guide	9
Benefits of Pulse® Pro Fluid Management	10
Steps to Build Your Pulse Pro System	11
Pulse Hub	12-13
Pulse Dispense Meter	14-15
Pulse Tank Level Monitor (TLM).	16
Pulse Pump Air Control (PAC).	17
Pulse Extender and Remote Extender	18
Pulse Packages and Accessories.	19
Steps to Build Your Pulse FC System.	20
Pulse FC Software	21
Pulse FC Starter Kit	22
SD™ Preset Dispense Meters.	23-24
Pulse FC Packages and Accessories	25
Traditional Box – Wired Fluid Control Components.	26



Choosing a Graco Fluid Management Solution

FEATURE	Traditional Box	Pulse FC	Pulse Pro
Control. Regulate the amount of fluid that's dispensed to reduce spillage and waste.			
Allow control of dispenses	✓	✓	✓
Restrict the quantity of fluid	✓	✓	✓
Ensure correct amount of fluid	✓	✓	✓
Meters. Put control into the hands of your technicians so they can be more productive, accurate and accountable.			
Works with petroleum, synthetic based oils, anti-freeze	✓	✓	✓
Works with windshield wash solvent	✓		✓
Meter displays quantity dispensed		✓	✓
Fluid measured at dispense point (highly accurate)		✓	✓
Installation. Seamless integration simplifies dispenses without compromising workflows or productivity.			
Works with oil bar	✓	✓	✓
Wire-free installation		✓	✓
Wireless communication			✓
Pump air control (PAC)	✓		✓
Flexibility. Accommodate emerging demands to maintain or expand productivity 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 decisions quickly.			
Simple PC-based software		✓	
No software to install			✓
Accessible from any PC, phone or tablet			✓
Fluid Management. Improve accountability for your 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 store inventory to minimize delays.			
Monitor tank levels (TLM)			✓
Dealer Management Solution (DMS) integration			✓
Reporting. Capture critical information and insights 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.



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



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



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



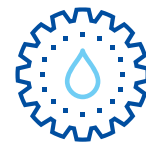
Scalability. Add Pulse into almost any environment quickly, and even retrofit applications or multiple buildings within the same facility.



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



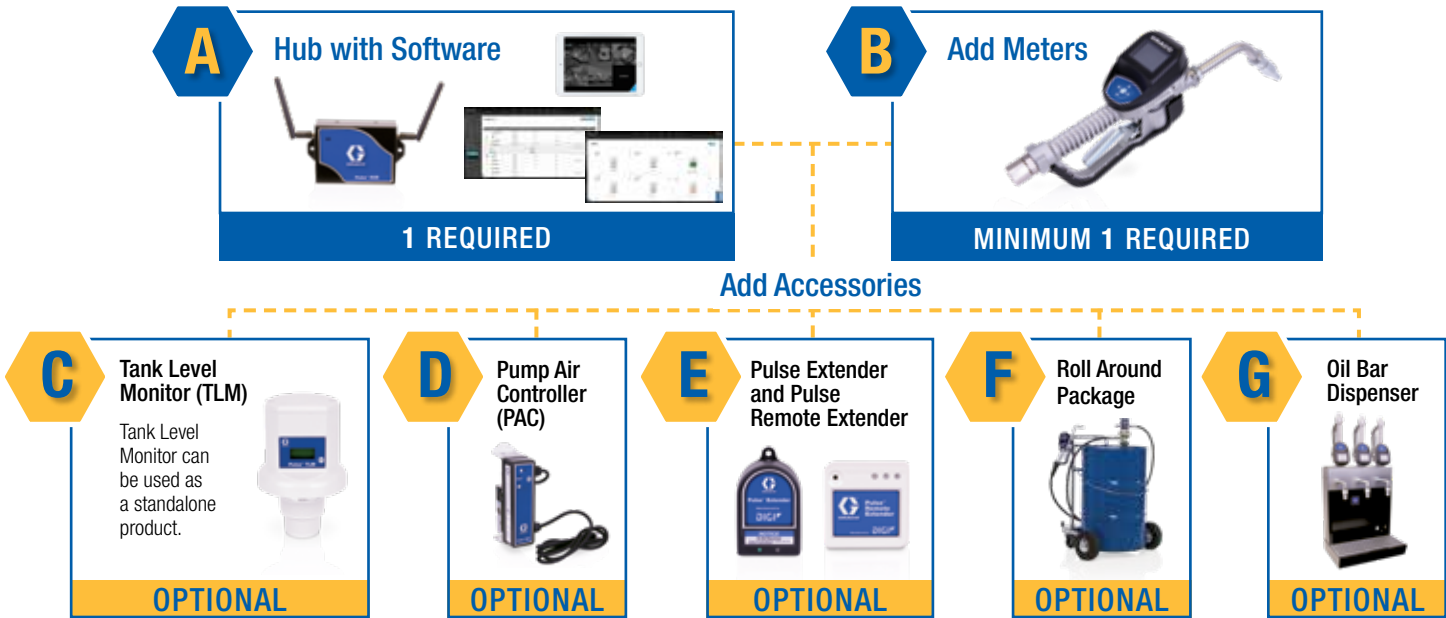
Simplicity. Avoid surprises, interruptions and delays. Fluids are tracked and recorded instantly and automatically.



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



Steps to Build Your Pulse Pro System:



A

Pulse Hub

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

**2 Year
Warranty!**

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.

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.

Easily Updates

Automatic updates through internet connection.

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	
Input Power	100–240 VAC line voltage (0.05 A)
To Hub	5 VDC (0.5 amps)
Warranty	Two years electronics

A

Ordering Information

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



- 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



- 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

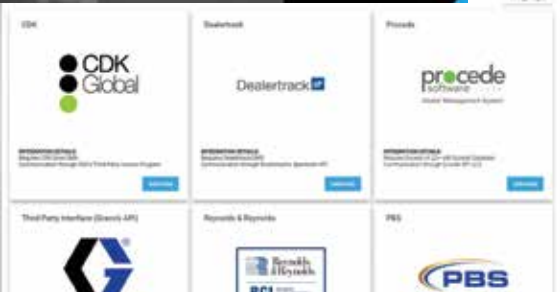


- Requires ERA
- Communication through RCI Web Service

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

B

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.

**5 Year
Warranty!**

Large, Intuitive Display

High-contrast display for low- and 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.

Fluid Extension Kits

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.

Technical 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 steel
Fluid Compatibility	Anti-freeze, gear oil, crankcase oil, ATF, windshield wash (up to 50% alcohol-based solutions)
Meter Accuracy†	+/- 0.5 percent
Warranty	Five year structural, 3 years electronics, 1 year wear components

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

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

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



B Ordering Information

8 gpm (30 lpm) Meters

Fluid	Extension	Nozzle	Size (in)	Part Number
Oil	Flexible	Automatic Quick-Close	1/2	25M319
	Rigid			25M317
Anti-Freeze	Flexible	Manual Anti-Freeze		25M320
	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 / Anti-Freeze	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
	Rigid	Oil	Non-drip, quick-close	255852	25M317
		Anti-freeze	Non-drip, quick-close	26C267	25M318
		Oil/Anti-freeze	High-flow, non-drip, quick-close	255857	25M323 / 25M329
	Rigid	Gear lube	Non-drip, quick-close	255854	25M326
	Flexible	Oil	Automatic, non-drip, quick-close	255853	25M319
		Anti-freeze	Non-drip, quick-close	26C268	25M320
		Oil/Anti-freeze	High-flow, non-drip, quick-close	255858	25M324 / 25M330
	Nozzle Only	Oil	Automatic, non-drip, quick-close	17R220	8 gpm oil meters
		Anti-freeze	Non-drip, quick-close	17T207	8 gpm anti-freeze meters
		Oil/Anti-freeze	High-flow, non-drip, quick-close	255461	18 gpm meters
	Nozzle Only	Gear lube	Non-drip, quick-close	255470	8 gpm gear lube meters

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
	17S659	Red
	17S660	Blue
	17S661	Green
	17S662	Yellow
	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
	131226	Pulse / SD meter boot

Pulse Meter Filter Kits

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



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.

**2 Year
Warranty!**

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)

Technical 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, anti-freeze, 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.

Compact Design

Allows for mounting directly on pump or in tight spaces.

Simple Wireless Setup

Automatic network identification.

Rugged Exterior

Sealed enclosure to protect internal components.

High-Volume Air Valve

Supports a variety of pumps.

Multiple Wiring Options

NEMA 5-15 plug or flying leads.

Multiple Thread Options

NPT and BSPP air valve options.



Fluid Management

D Ordering Information	
Part Number	Description
24Z728	NPT with NEMA 5-15 plug

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

Pulse Extender

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

Expands Pulse Network

Supports 20 devices and extends the network range.

Simple Wireless Setup

Automatic network identification.

Integrated Electrical Plug

Simply plugs into wall.

Compact Design

Place conveniently in standard electrical outlet locations.



Technical Specifications

Operating Temperature	32°F to 158°F (0°C to 70°C)
Power Input	Universal AC input (85 VAC to 265 VAC)
Length	2.87 in (7.3 cm)
Width	1.97 in (5.0 cm)
Height	1.37 in (3.5 cm)
Weight	2.50 oz (70.9 g)
Warranty	Two years electronics

Ordering Information

Part Number	Description
17F885	Extender (Type A)

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.



Technical 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

F

Ordering Information

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.

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

G

Ordering Information

Oil Bar

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



Oil Bar

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

Accessories

	Part Number	Description
	249440	Console bracket

Pulse Pro Demo Kit

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

	Part Number	Description
	25D625	Includes Pulse Hub (24Z978), Pulse Dispense Meter, Pulse TLM (25M449), Pulse PAC (24Z728), Pulse Extender (17F885), 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.

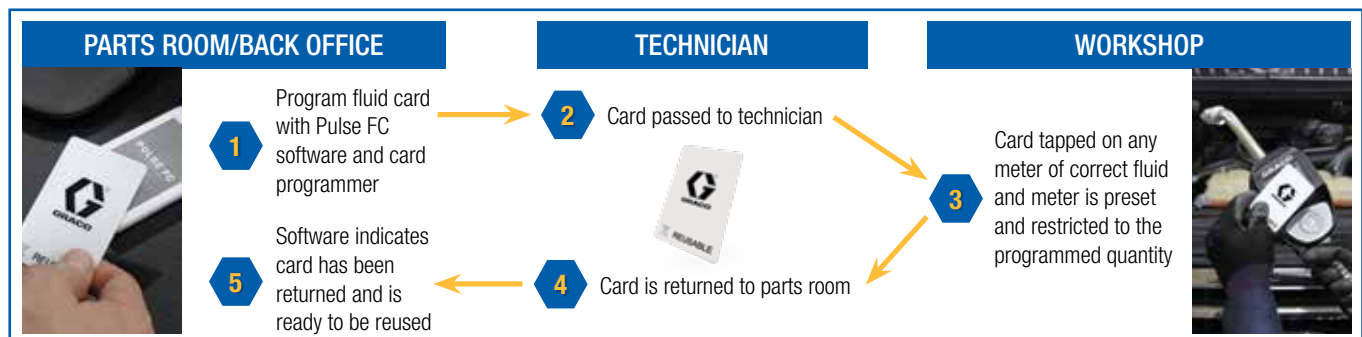


Steps to Build Your Pulse FC System:



HOW IT WORKS

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.





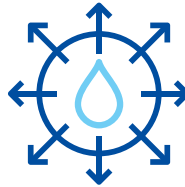
GAIN INSIGHT INTO AND CONTROL OF YOUR BULK FLUIDS



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.



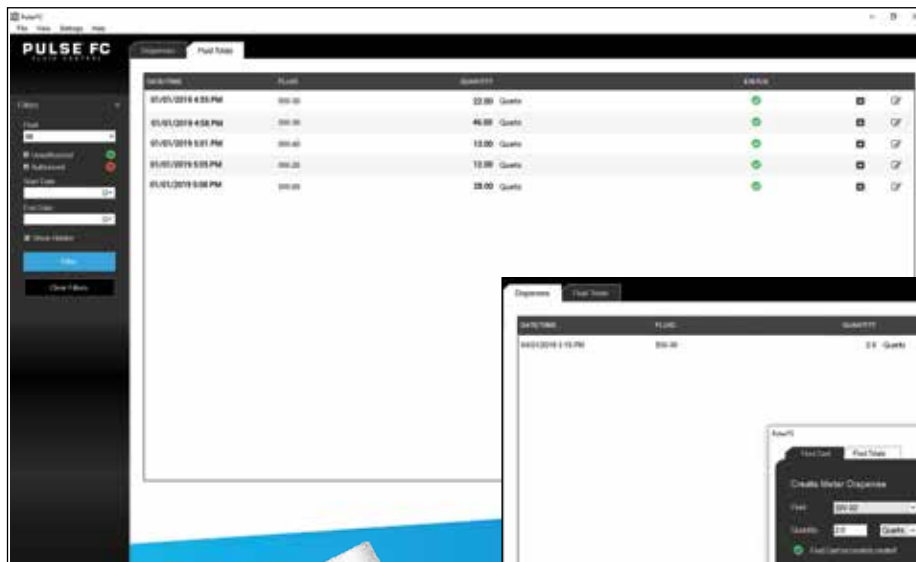
Scalability. Add Pulse FC into almost any environment quickly, even retrofit applications and avoid excessive installation costs and delays. You can also easily upgrade to Graco's Pulse Pro.



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.



A

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 Programmer

Easily program cards for dispense or fluid totals.

Pulse FC Fluid Cards

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

Pulse FC Software

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

Pulse FC Software Quick Start

Easy-to-follow instructions for quick system setup.

Fluid Management

A

Ordering Information

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



B

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.

Up to
18 gpm
(68 lpm)

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™ FC and upgradeable to Pulse™ 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)
- Anti-freeze

Technical 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.

B Ordering Information

SD™ Preset Electronic Meters



26C384

	Dispense Type	Flow Range gpm (lpm)	Fluid	Extension	Inlet in (NPT)	Part Number
SDP8	Preset (Pulse FC enabled)	0.25–8 (1–30)	Oil	Rigid	1/2	26C384
				Flexible	1/2	26C354
			Anti-freeze	Rigid	1/2	26C385
				Flexible	1/2	26C355
			Gear lube	Rigid	1/2	26C358
SDP18	Preset (Pulse FC enabled)	0.25–18 (1–68)	Oil	Rigid	1/2	26C356
				Flexible	1/2	26C357
				Rigid	3/4	26C360
				Flexible	3/4	26C361

Nozzle and Extension Kits

	Extension	Fluid	Nozzle Description	Part Number	Compatible Meters
	Rigid	Oil	Non-drip, quick-close	255852	SDP8
		Anti-freeze	Non-drip, manual open/close	26C267	SDP8
		Oil/Anti-freeze	High-flow, non-drip, quick-close	255857	SDP18
	Rigid	Gear lube	Non-drip, quick-close	255854	SDP8
	Flexible	Oil	Automatic, non-drip, quick-close	255853	SDP8
		Anti-freeze	Non-drip, manual open/close	26C268	SDP8
		Oil/Anti-freeze	High-flow, non-drip, quick-close	255858	SDP18
	Nozzle Only	Oil	Automatic, non-drip, quick-close	17R220	SDP8
	Nozzle Only	Gear lube	Non-drip, quick-close	255470	SDP8
	Nozzle Only	Oil/Anti-freeze	Non-drip, manual open/close	17T207	SDP8
	Flexible	Oil/Anti-freeze	Extension only, 2 ft length	131733	SDP8

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

Oil Bar

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



Oil Bar

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

Accessories

Pulse FC Fluid Cards

	Part Number	Description
	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 O-rings (155332)

Swivel Covers / Impact Protection

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

Hose Identification Wraps

Vinyl hose wrap for easy identification of meter fluid.

	Part Number	Description
	17S659	Red
	17S660	Blue
	17S661	Green
	17S662	Yellow
	17S663	White

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 anti-freeze, 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

A close-up photograph of a white Graco Fire-Ball 425 oil pump. The pump has a blue label with the Graco logo and the text 'Fire-Ball 425' and 'AIR-POWERED PUMP'. It is connected to various hoses and fittings. The background is blurred, showing other industrial equipment.

OIL PUMPS

	Page
Oil Pump Selection Guide	28-29
LD Series™ Oil Pumps	30-45
LD Series™ Oil Pump Accessories	46-47
Mini Fire-Ball® 225 Oil Pumps	48-51
Fire-Ball® 300 Oil Pumps	52-56
Fire-Ball® 425 Oil Pumps	57-60
Fast-Ball® Oil Pumps	61-62
Oil Pump Accessories	63-68
NXT™ High-Flo® Oil Pumps	69-71
NXT Dura-Flo® Oil Pumps	72-75
Dyna-Star® Hydraulic Oil Pumps	76-77
Power-Star™ Hydraulic Oil Pumps	78-79
Manually Operated Oil Pumps	80-81

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)	62
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)	30
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)	30
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)	48
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)	52
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)	57
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)	57
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)	57

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)	69
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)	69
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)	69
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)	71
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)	72
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)	72
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)	72

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)	76
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)	76
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)	78

LD Series Oil Pumps



**5 Year
Warranty!**

Durable and Hardworking

Stay ahead of the competition with LD Series pumps. These affordable and full-featured pumps are designed for 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

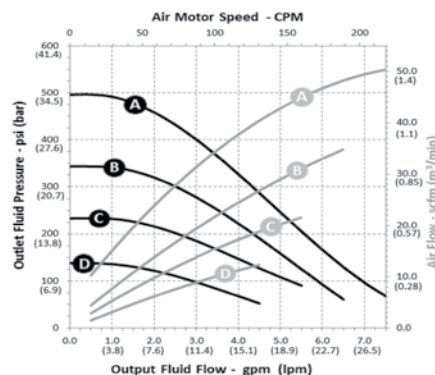
- Automotive dealerships
- Fast lube centers
- Service shops

Typical Fluids Handled

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

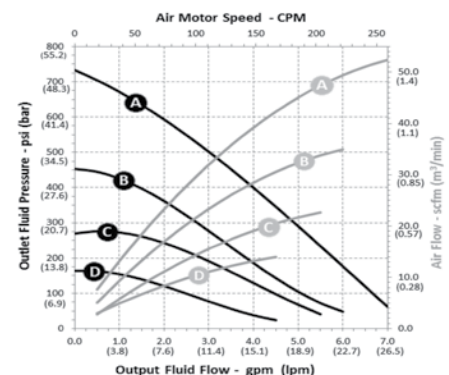
Pump Performance

LD Series 3:1 Pumps



Inlet Air Pressures:
A = 150 psi
B = 100 psi
C = 70 psi
D = 40 psi
 Test Fluid :
 ISO 46 Hydraulic Oil

LD Series 5:1 Pumps



Inlet Air Pressures:
A = 150 psi
B = 100 psi
C = 70 psi
D = 40 psi
 Test Fluid :
 ISO 46 Hydraulic Oil



Technical 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)

Ordering Information

Mobile Oil Packages – Cart

Air regulator (part 24H420 – ordered separately) must be used for LD pump thermal relief function.



Package Number	24H751	24H750	24H753	24H752	24H775	24H774	24H777	24H776
Ratio	3:1	3:1	3:1	3:1	3:1	3:1	3:1	3:1
Pump Part Number	24G576	24G576	24G576	24G576	24G576	24G576	24G576	24G576
Suction Tube Size	200 L	200 L	200 L	200 L	200 L	200 L	200 L	200 L
Pump Downtube	16F886	16F886	16F886	16F886	16F886	16F886	16F886	16F886
Meter Type	Manual	Manual	Preset	Preset	Manual	Manual	Preset	Preset
Meter Part Number	25C903	25C904	256216	255277	25C903	25C904	256216	255277
Meter Extension	Rigid	Flexible	Rigid	Flexible	Rigid	Flexible	Rigid	Flexible
Hose Kit	24J495	24J495	24J495	24J495	24H865	24H865	24H865	24H865
Hose Reel Type	LD	LD	LD	LD	–	–	–	–
Hose Size	1/2 in x 35 ft	1/2 in x 35 ft	1/2 in x 35 ft	1/2 in x 35 ft	–	–	–	–
Hose Reel	24H662	24H662	24H662	24H662	–	–	–	–
55 gal Cart	24F915	24F915	24F915	24F915	24F915	24F915	24F915	24F915
Instruction Manual	3A1335	3A1335	3A1335	3A1335	3A1335	3A1335	3A1335	3A1335



Package 24H775 installed on a 55 gallon drum (not included in package).

Ordering Information

Mobile Oil Packages – Dolly

Air regulator (part 24H420 – ordered separately) must be used for LD pump thermal relief function.



Package Number	25C551	25C553	25C550	25C552
Ratio	3:1	3:1	3:1	3:1
Pump Part Number	24G576	24G576	24G576	24G576
Container Size	16 gal (120 lb)	16 gal (120 lb)	55 gal (400 lb)	55 gal (400 lb)
Pump Downtube	16F878	16F878	16F886	16F886
Meter Type	Manual	Preset	Manual	Preset
Meter Part Number	25C903	256216	25C903	256216
Meter Extension	Rigid	Rigid	Rigid	Rigid
Hose Kit	24H865	24H865	24H865	24H865
Portable Base	131184	131184	129645	129645
Instruction Manual	3A1335	3A1335	3A1335	3A1335

Ordering Information

Wall Mount Oil Packages

Air regulator (part 24H420 – ordered separately) must be used for LD pump thermal relief function.



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

Air regulator (part 24H420 – ordered separately) must be used for LD pump thermal relief function.



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	25C903	25C904	256216	255277
Meter Extension	Rigid	Flexible	Rigid	Flexible
Hose Kit	24H859	24H859	24H859	24H859
Instruction Manual	3A1335	3A1335	3A1335	3A1335

Ordering Information

Stationary Oil Packages – Tote

Standard packages include LD Series hose reel. Air regulator (part 24H420 – ordered separately) must be used for LD pump thermal relief function.

				
				
Package Number	24H702	24H704	24H726	24H728
Ratio	3:1	3:1	3:1	3:1
Pump Part Number	24G576	24G576	24G576	24G576
Suction Tube Size	275 gal (1,040 l)	275 gal (1,040 l)	275 gal (1,040 l)	275 gal (1,040 l)
Pump Downtube	16F885	16F885	24H669	24H669
Mounting Position	Top	Top	Drain	Drain
Reel Type	LD	LD	LD	LD
Hose Reel Part Number	24H662	24H662	24H662	24H662
Hose Size	1/2 in x 35 ft	1/2 in x 35 ft	1/2 in x 35 ft	1/2 in x 35 ft
LD Reel Bracket Kit	24F932	24F932	24F932	24F932
Meter Type	Manual	Preset	Manual	Preset
Meter Part Number	25C903	256216	25C903	256216
Meter Extension	Rigid	Rigid	Rigid	Rigid
Hose Kit	6 ft x 3/8 in air hose / 6 ft x 1/2 in fluid hose	6 ft x 3/8 in air hose / 6 ft x 1/2 in fluid hose	6 ft x 3/8 in air hose / 6 ft x 1/2 in fluid hose	6 ft x 3/8 in air hose / 6 ft x 1/2 in fluid hose
Hose Kit Part Number	24J495	24J495	24J495	24J495
Top Mount Tote Bracket	24F930	24F930	24F931	24F931
Tote Mount Pump Bracket	–	–	24F920	24F920
Meter Tray	24F914	24F914	24F914	24F914
Instruction Manual	3A1335	3A1335	3A1335	3A1335

Package 24H728 installed on a 275 gallon tote (not included in package).



Ordering Information

Deluxe Stationary Oil Packages – Tote

Deluxe packages include SD Series hose reel. Air regulator (part 24H420 – ordered separately) must be used for LD pump thermal relief function.



Package Number	24K838	24K842
Ratio	3:1	3:1
Pump Part Number	24G576	24G576
Suction Tube Length	275 gal (1,040 l)	275 gal (1,040 l)
Pump Downtube	16F885	16F885
Reel Type	SD	SD
Hose Reel Part Number	HPM65B	HPM65B
Meter Type	Preset	Manual
Meter Part Number	25G216	25C904
Meter Extension	Rigid	Flexible
Hoses and Fittings	24J495	24J495
Top Mount Tote Bracket	24F930	24F930
SD Reel/IBC Tote Bracket	24K285	24K285
Meter Tray	24F914	24F914
Instruction Manual	3A1335	3A1335

Ordering Information

Tank Mount Oil Packages

Air regulator (part 24H420 – ordered separately) must be used for LD pump thermal relief function.

				
				
Package Number	24J776	24J733	24J734	24K836
Ratio	3:1	3:1	3:1	3:1
Pump Part Number	24G576	24G576	24G576	24G576
Hose Reel Type	LD	SD	SD	SD
Hose Reel	24H662	HPM65B	HPM65B	HPM65B
Meter Type	Manual	Manual	Preset	Manual
Meter Part Number	25C903	25C903	256216	25C904
Meter Extension	Rigid	Rigid	Rigid	Flexible
Inlet Kit	24C538	218549	218549	218549
Mounting Bracket	24C772	–	–	–
Instruction Manual	3A1335	3A1335	3A1335	3A1335

Ordering Information

Deluxe Tank Mount Oil Packages

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



Package Number	24K777	24K797	24K799	24K834
Ratio	3:1	3:1	3:1	3:1
Pump Part Number	24G576	24G576	24G576	24G576
Hose Reel Type	SD	SD	SD	SD
Hose Size	1/2 in x 50 ft	1/2 in x 50 ft	1/2 in x 50 ft	1/2 in x 35 ft
Hose Reel	HPM65B	HPM65B	HPM65B	HPM33B
Meter Type	Preset	Manual	Manual	Manual
Meter Part Number	256216	25C903	25C904	25C903
Meter Extension	Rigid	Rigid	Flexible	Rigid
Air and Fluid Hoses with Fittings	24J495	24J495	24J495	24J495
Mini Air Regulator with Gauge	24H420	24H420	24H420	24H420
Instruction Manual	3A1335	3A1335	3A1335	3A1335

Ordering Information

Mobile Oil Packages – Cart

Air regulator (part 24H420 – ordered separately) must be used for LD pump thermal relief function.



Package Number	24H916	24H915	24H918	24H917	24H941	24H940	24H943	24H942
Ratio	5:1	5:1	5:1	5:1	5:1	5:1	5:1	5:1
Pump Part Number	24G588	24G588	24G588	24G588	24G588	24G588	24G588	24G588
Suction Tube Size	200 L	200 L	200 L	200 L	200 L	200 L	200 L	200 L
Pump Downtube	16F886	16F886	16F886	16F886	16F886	16F886	16F886	16F886
Meter Type	Manual	Manual	Preset	Preset	Manual	Manual	Preset	Preset
Meter Part Number	25C903	25C904	256216	255277	25C903	25C904	256216	255277
Meter Extension	Rigid	Flexible	Rigid	Flexible	Rigid	Flexible	Rigid	Flexible
Hose Kit	24J495	24J495	24J495	24J495	24H865	24H865	24H865	24H865
Hose Reel Type	LD	LD	LD	LD	–	–	–	–
Hose Size	1/2 in x 35 ft	1/2 in x 35 ft	1/2 in x 35 ft	1/2 in x 35 ft	–	–	–	–
Hose Reel	24H662	24H662	24H662	24H662	–	–	–	–
55 gal Cart	24F915	24F915	24F915	24F915	24F915	24F915	24F915	24F915
Instruction Manual	3A1335	3A1335	3A1335	3A1335	3A1335	3A1335	3A1335	3A1335



Package 24H941 installed on a 55 gallon drum (not included in package).

Ordering Information

Mobile Oil Packages – Dolly

Air regulator (part 24H420 – ordered separately) must be used for LD pump thermal relief function.



Package Number	25C555	25C557	25C554	25C556
Ratio	5:1	5:1	5:1	5:1
Pump Part Number	24G588	24G588	24G588	24G588
Container Size	16 gal (120 lb)	16 gal (120 lb)	55 gal (400 lb)	55 gal (400 lb)
Pump Downtube	16F878	16F878	16F886	16F886
Meter Type	Manual	Preset	Manual	Preset
Meter Part Number	25C903	256216	25C903	256216
Meter Extension	Rigid	Rigid	Rigid	Rigid
Hose Kit	24H865	24H865	24H865	24H865
Portable Base	131184	131184	129645	129645
Instruction Manual	3A1335	3A1335	3A1335	3A1335

Ordering Information

Wall Mount Oil Packages

Air regulator (part 24H420 – ordered separately) must be used for LD pump thermal relief function.



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



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

Stationary Oil Packages

Air regulator (part 24H420 – ordered separately) must be used for LD pump thermal relief function.



Package Number	24H965	24H964	24H967	24H966
Ratio	5:1	5:1	5:1	5:1
Pump Part Number	24G588	24G588	24G588	24G588
Suction Tube Size	Universal	Universal	Universal	Universal
Pump Downtube	16F878	16F878	16F878	16F878
Meter Type	Manual	Manual	Preset	Preset
Meter Part Number	25C903	25C904	256216	255277
Meter Extension	Rigid	Flexible	Rigid	Flexible
Hose Kit	24H859	24H859	24H859	24H859
Instruction Manual	3A1335	3A1335	3A1335	3A1335

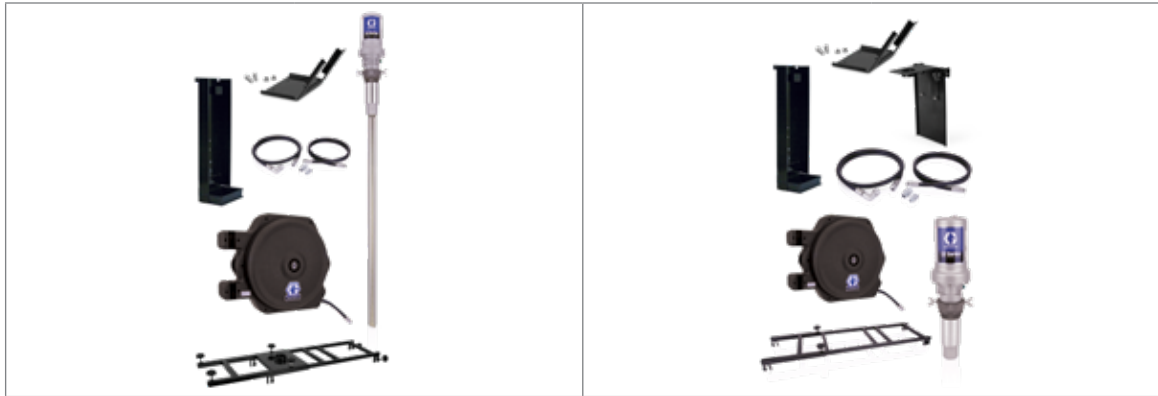
LD Series 5:1 Oil Pump Packages



Ordering Information

Stationary Oil Packages – Tote

Standard packages include LD Series hose reel. Air regulator (part 24H420 – ordered separately) must be used for LD pump thermal relief function.



				
Package Number	24H868	24H870	24H892	24H894
Ratio	5:1	5:1	5:1	5:1
Pump Part Number	24G588	24G588	24G588	24G588
Suction Tube Size	275 gal (1,040 l)	275 gal (1,040 l)	275 gal (1,040 l)	275 gal (1,040 l)
Pump Downtube	16F885	16F885	24H669	24H669
Mounting Position	Top	Top	Drain	Drain
Reel Type	LD	LD	LD	LD
Hose Reel Part Number	24H662	24H662	24H662	24H662
Hose Size	1/2 in x 35 ft	1/2 in x 35 ft	1/2 in x 35 ft	1/2 in x 35 ft
LD Reel Bracket Kit	24F932	24F932	24F932	24F932
Meter Type	Manual	Preset	Manual	Preset
Meter Part Number	25C903	256216	25C903	256216
Meter Extension	Rigid	Rigid	Rigid	Rigid
Hose Kit	6 ft x 3/8 in air hose / 6 ft x 1/2 in fluid hose	6 ft x 3/8 in air hose / 6 ft x 1/2 in fluid hose	6 ft x 3/8 in air hose / 6 ft x 1/2 in fluid hose	6 ft x 3/8 in air hose / 6 ft x 1/2 in fluid hose
Hose Kit Part Number	24J495	24J495	24J495	24J495
Top Mount Tote Bracket	24F930	24F930	24F931	24F931
Tote Mount Pump Bracket	–	–	24F920	24F920
Meter Tray	24F914	24F914	24F914	24F914
Instruction Manual	3A1335	3A1335	3A1335	3A1335

Package 24H894 installed on a 275 gallon tote (not included in package).



Ordering Information

Deluxe Stationary Oil Packages – Tote

Deluxe packages include SD Series hose reel. Air regulator (part 24H420 – ordered separately) must be used for LD pump thermal relief function.



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	SD	SD
Hose Reel Part Number	HPM65B	HPM65B
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

Ordering Information

Oil Packages – Tank Mount

Air regulator (part 24H420 – ordered separately) must be used for LD pump thermal relief function.



Package Number	24J777	24J735	24J736	24K837
Ratio	5:1	5:1	5:1	5:1
Pump Part Number	24G588	24G588	24G588	24G588
Reel Type	LD	SD	SD	SD
Hose Reel Part Number	24H662	HPM65B	HPM65B	HPM65B
Meter Type	Manual	Manual	Preset	Manual
Meter Part Number	25C903	25C903	256216	25C904
Meter Extension	Rigid	Rigid	Rigid	Flexible
Inlet Kit	24C538	218549	218549	218549
Mounting Bracket	24C772	–	–	–
Instruction Manual	3A1335	3A1335	3A1335	3A1335

Ordering Information

Deluxe Oil Packages – Tank Mount

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

				
				
Package Number	24K796	24K798	24K800	24K835
Ratio	5:1	5:1	5:1	5:1
Pump Part Number	24G588	24G588	24G588	24G588
Reel Type	SD	SD	SD	SD
Hose Size	1/2 in x 50 ft (12.7 mm x 15 m)	1/2 in x 50 ft (12.7 mm x 15 m)	1/2 in x 50 ft (12.7 mm x 15 m)	1/2 in x 35 ft (12.7 mm x 10.6 m)
Hose Reel Part Number	HPM65B	HPM65B	HPM65B	HPM33B
Meter Type	Preset	Manual	Manual	Manual
Meter Part Number	256216	25C903	25C904	25C903
Meter Extension	Rigid	Rigid	Flexible	Rigid
Air and Fluid Hoses with Fittings	24J495	24J495	24J495	24J495
Mini Air Regulator with Gauge	24H420	24H420	24H420	24H420
Instruction Manual	3A1335	3A1335	3A1335	3A1335

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

Carts

	Part Number	Description
	24F915	Drum cart with pneumatic wheels for 55 gallon drums, includes chain for securing drum to cart

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

	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			
			Fluid Hose	Air Hose	Swivel	Union Fitting
	24H865	15 ft LD pump fluid hose kit	1/2 in x 15 ft	3/8 in x 6 ft	157705	156684
	24H859	6 ft LD pump fluid hose kit	1/2 in x 6 ft	3/8 in x 6 ft	157705	156684

Suction Kits

	Part Number	Description
	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)

Ordering Information

Mounting Hardware

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

Tote Mount Accessories

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

Mini Fire-Ball® 225 Oil Pumps



**7 Year
Warranty!**

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

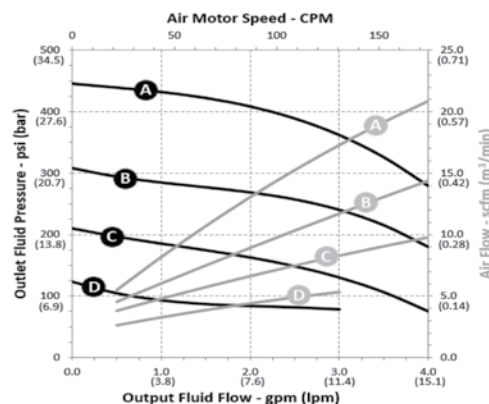
- Automotive dealerships
- Fast lube centers
- Service shops
- Heavy-duty dealerships
- Fleet services facilities
- In-plant
- Lube trucks
- Mining

Typical Fluids Handled

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

Pump Performance

Mini Fire-Ball 225 3:1 Pumps



Inlet Air Pressures:

- (A) = 150 psi (10.3 bar)
- (B) = 100 psi (6.9 bar)
- (C) = 70 psi (4.8 bar)
- (D) = 40 psi (2.8 bar)

Test Fluid :
No. 10 Weight Oil



Mini Fire-Ball 225 Oil Pumps

Technical Specifications

Fluid Pressure Ratio	3:1
Air Motor Effective Diameter	2.25 in (57.2 mm)
Maximum Fluid Working Pressure	540 psi (37 bar / 3.7 MPa)
Approximate Free Flow Rate @ 100 psi	8.3 gal/min (32 liters/min)
Output per Cycle	87 cc
Approximate Air Use and Flow @ 100 psi (80 cpm)	9 scfm @ 1.9 gpm (0.25 m ³ /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



Package Number	246903*	246904*	246906*	246907**	248230**
Ratio	3:1	3:1	3:1	3:1	3:1
Package Type	Portable	Cover-mounted	Cover-mounted	Bung-mounted	Bung-mounted
Maximum Container Size	16 gal (60 l)	16 gal (60 l)	55 gal (200 l)	55 gal (200 l)	275 gal (1,040 l)
Pump	248097	248097	248097	248097	246775
Meter Type	Manual	—	—	—	—
Meter Part Number	25M413	—	—	—	—
Meter Extension	Rigid	—	—	—	—
Dispense/ Hose Fitting Kit	237075	222063	222063	222063	222062
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)	1/2 in x 6 ft (12.7 mm x 1.8 m)	1/2 in x 1.5 ft (12.7 mm x 0.46 m)
Air Hose Size	—	3/8 in x 6 ft (9.5 mm x 1.8 m)	3/8 in x 6 ft (9.5 mm x 1.8 m)	3/8 in x 6 ft (9.5 mm x 1.8 m)	3/8 in x 1.5 ft (9.5 mm x 0.46 m)
Air Regulator	224512	224512	224512	—	—
Pump Shim	17C270	17C270	17C270	—	—
Cover	24R350	24R350	200326	—	—
Caster Base	203622	—	—	—	—
Instruction Manual	307884	307883	307883	307883	309868

*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.

Ordering Information

Bulk Oil Dispensing Packages

				
				
Package Number	248623*	248622*	24F205	24F206
Ratio	3:1	3:1	3:1	3:1
Pump	248097	248097	246775	246775
Bung Adapter	—	—	222308	222308
Reel Size	1/2 in x 50 ft (12.7 mm x 15.2 m)	1/2 in x 35 ft (12.7 mm x 11 m)	1/2 in x 50 ft (12.7 mm x 15.2 m)	1/2 in x 50 ft (12.7 mm x 15.2 m)
Reel Type	SD	SD	SD	SD
Hose Reel	HPM65B	HPM33B	HPM65B	HPM65B
Meter Type	LD	LD	Mechanical	LD
Manual/Preset	Manual	Manual	Manual	Manual
Meter	25C903	25C903	24V034	25C903
Installation Kit	—	—	222062	222062
Air Regulator	—	—	109075	109075
Instruction Manual	309868, 312668, 313431	309868, 312668, 313431	309868, 313431	309868, 313431

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

Fire-Ball 300 5:1 Oil Pumps



**7 Year
Warranty!**

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

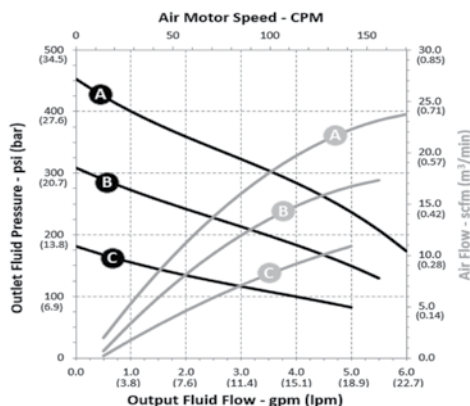
- Automotive dealerships
- Fast lube centers
- Service shops
- Heavy-duty dealerships
- Fleet services facilities
- In-plant
- Lube trucks
- Mining

Typical Fluids Handled

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

Pump Performance

Fire-Ball 300 5:1 Pumps



Inlet Air Pressures:

- (A) = 100 psi (6.9 bar)
- (B) = 70 psi (4.8 bar)
- (C) = 40 psi (2.8 bar)

Test Fluid : ISO 46 Oil



Fire-Ball 300 5:1 Oil Pumps

Technical 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 m ³ /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



Package Number	225728*	225094**	225642**	225640**	225931**	225852**
Ratio	5:1	5:1	5:1	5:1	5:1	5:1
Package Type	Portable	Cover-mounted	Cover-mounted	Bung-mounted	Bung-mounted	Universal
Maximum Container Size	16 gal (60 l)	16 gal (60 l)	55 gal (200 l)	55 gal (200 l)	275 gal (1,040 l)	Universal
Pump	203872	203872	203857	204254	222087	203876
Meter Type	Manual	—	—	—	—	—
Meter Part Number	25M413	—	—	—	—	—
Meter Extension	Rigid	—	—	—	—	—
Dispense/ Hose Fitting Kit	237075	222063	222063	222063	222063	222062
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)	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 1.5 ft (12.7 mm x 0.46 m)
Air Hose Size	—	3/8 in x 6 ft (9.5 mm x 1.8 m)	3/8 in x 6 ft (9.5 mm x 1.8 m)	3/8 in x 6 ft (9.5 mm x 1.8 m)	3/8 in x 6 ft (9.5 mm x 1.8 m)	3/8 in x 1.5 ft (9.5 mm x 0.46 m)
Air Regulator	224512	224512	224512	—	—	—
Cover	24R350	24R350	200326	—	—	—
Caster Base	203622	—	—	—	—	—
Bung Adapter	—	—	—	222308	222308	—
Instruction Manual	307884	307883	307883	307883	307883	306520

*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.

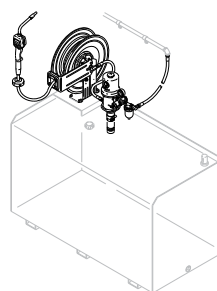
Ordering Information

Bulk Oil Dispensing Packages

				
Package Number	241633*	224541*	244038*	224534*
Ratio	5:1	5:1	5:1	5:1
Dispensing Location	—	—	—	Bench/Top Tank
Pump	203876	203876	203876	203876
Regulator/Gauge	109075	109075	109075	109075
Nipple	156849	156849	156849	156849
Bung Adapter	222308	222308	222308	222308
Reel Size	1/2 in x 35 ft	1/2 in x 50 ft	1/2 in x 50 ft	1/2 in x 50 ft
Reel Type	SD	SD	SD	SD
Hose Reel	HPM33B	HPM65B	HPM65B	HPM65B
Type of Meter	SD	SD	SD	SD
Manual/Preset	Manual	Manual	Preset	Manual
Meter	25M404	25M404	26C384	25M404
90° Swivel	—	—	—	157416
Air Filter	—	—	—	106148
Drain Valve	—	—	—	127711
Hose	—	220598	220598	222063
Thermal Relief Valve	—	—	—	237893
Hose Reel Inlet Kit (Not Included)	218549	218549	218549	218549

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

Package 224534 installed on a bulk tank (not included in package).



Ordering Information

Lube Truck Packages



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

*Order 3/8 in (9.5 mm) air regulator and gauge (109075) separately.

**10 Year
Warranty!**

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

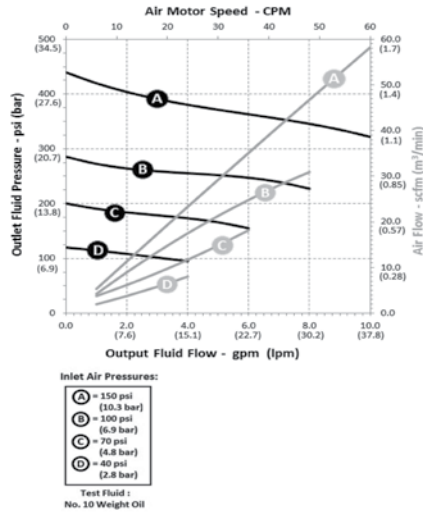
- Petroleum- and synthetic-based oils (motor, gear and ATF)

Fire-Ball 425 Oil Pump Packages

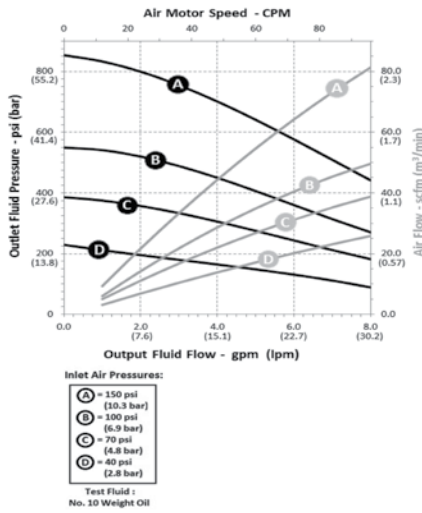


Pump Performance

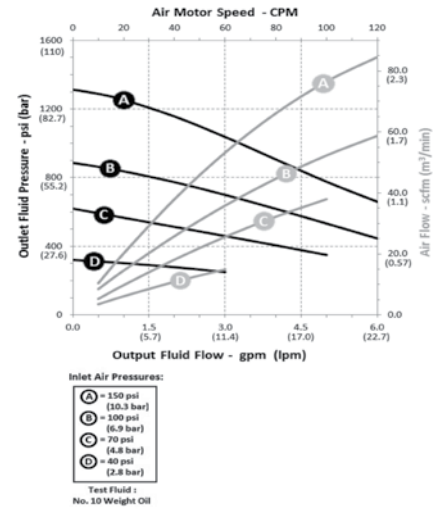
Fire-Ball 425 3:1 Pumps



Fire-Ball 425 6:1 Pumps



Fire-Ball 425 10:1 Pumps



Technical 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

Ordering Information

Oil Pump Packages

						
						
Package Number	244846	244628*	244847	225782**	225786**	225853**
Package Type	Wall-mounted	Wall-mounted	Wall-mounted	Cover-mounted	Bung-mounted	Universal supply
Maximum Container Size	Universal	Universal	Universal	55 gal (200 l)	55 gal (200 l)	Universal
Ratio	3:1	6:1	10:1	10:1	10:1	10:1
Pump	237526	238108	205626	222065	222095	205626
Hose/Fitting Kit	222068	222068	222068	222066	222066	222068
Fluid Hose Size	3/4 in x 1.5 ft	3/4 in x 1.5 ft	3/4 in x 1.5 ft	3/4 in x 6 ft	3/4 in x 6 ft	3/4 in x 1.5 ft
Air Hose Size	1/2 in x 1.5 ft	1/2 in x 1.5 ft	1/2 in x 1.5 ft	1/2 in x 6 ft	1/2 in x 6 ft	1/2 in x 1.5 ft
Cover	—	—	—	200326	—	—
Filter, Regulator, Lubricator [FRL]	217072	217072	217072	—	—	—
Air Shutoff Valve	110225	110225	110225	—	—	—
Fluid Shutoff Valve	108537	108537	108537	—	—	—
Wall Mount Bracket	238245	238245	238245	—	—	—
Instruction Manual	309351	309351	309351	307883	307883	306520

*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.

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

*Order 1/2 in (12.7 mm) air regulator (104266) and gauge (100960) separately.

5 Year
Warranty!

Used for Low-Volume Transfer of Petroleum-Base Lubricants

This air-operated piston pump is ideal for pumping petroleum and synthetic-based oils and provides a continuous duty flow rate of up to 5 gpm.

High-Quality Air Motor

Differential air motor ensures smooth pumping.

Fewer Repairs

In-line design with fewer moving parts in the air motor assembly means less downtime and low repair cost.

Reliable Fluid Flow

Double-acting pump provides reliable fluid flow.

Durable

Rated for continuous duty in challenging applications.

Typical Applications

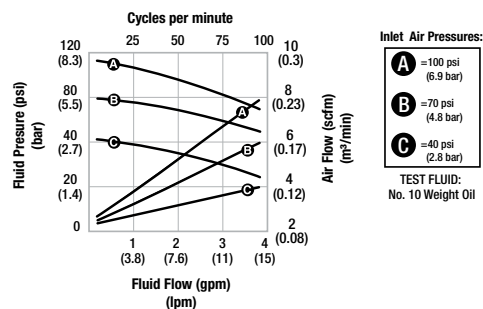
- Automotive dealerships
- Fast lube centers
- Service shops
- Heavy-duty dealerships
- Fleet services facilities
- In-plant
- Lube trucks
- Mining

Typical Fluids Handled

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

Pump Performance

Fast-Ball 1:1 Pumps



Technical 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 Number	222103	222104	222051
Ratio	1:1	1:1	1:1
Type of Package	Bung-mounted	Bung-mounted	Universal
Container Size	55 gal (200 l)	275 gal (1,040 l)	Universal
Bung Adapter	222308	222308	—
Instruction Manual	307906	307906	307906

Pump Packages



Package Number	222602	239702
Ratio	1:1	1:1
Type of Package	Non-metered dispense	Metered dispense
Container Size	55 gal (200 l)	55 gal (200 l)
Pump	222103	222103
Dispense Kit	218115	239703
Regulator Assembly	218316	218316
Hose	109125	—
Hose Length	6 ft (1.8 m)	—
Bung Adapter	222308	222308
Instruction Manual	307637	307637

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

Oil Pump Accessories

Ordering Information

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	Description	Compatible Pumps	Includes				
				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
	238125	For mounting universal pumps to tanks	Mini Fire-Ball 225 3:1 Fire-Ball 300 5:1 Fire-Ball 425 10:1	191075	172405	238370	155494	—

Carts

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

Clamps

	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
	210880		Fire-Ball 300 5:1 Fire-Ball 425 10:1

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

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

Ordering Information

Downtube – Universal

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

Drum Covers

	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

	Part Number	Description	Includes		
			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

	Part Number	Description
	240417	1/2 in inlet, 60 mesh strainer, which prevents foreign material from entering dispense lines
	240418	3/8 in inlet, 60 mesh strainer, which prevents foreign material from entering dispense lines
	238433	40 mesh replacement element, 3 count
	238434	40 mesh replacement element, 25 count
	238431	60 mesh (standard) replacement element, 3 count
	238432	60 mesh (standard) replacement element, 25 count
	238429	100 mesh replacement element, 3 count

Oil Pump Accessories

Ordering Information

Fluid Y-Strainers

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

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

Hose and Fitting Kits for Fire-Ball 425 Pumps

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

Ordering Information

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

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

Portable Bases

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

Runaway Valve

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

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

Oil Pump Accessories

Ordering Information

Suction Tubes

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

Thermal Relief Valve Kits

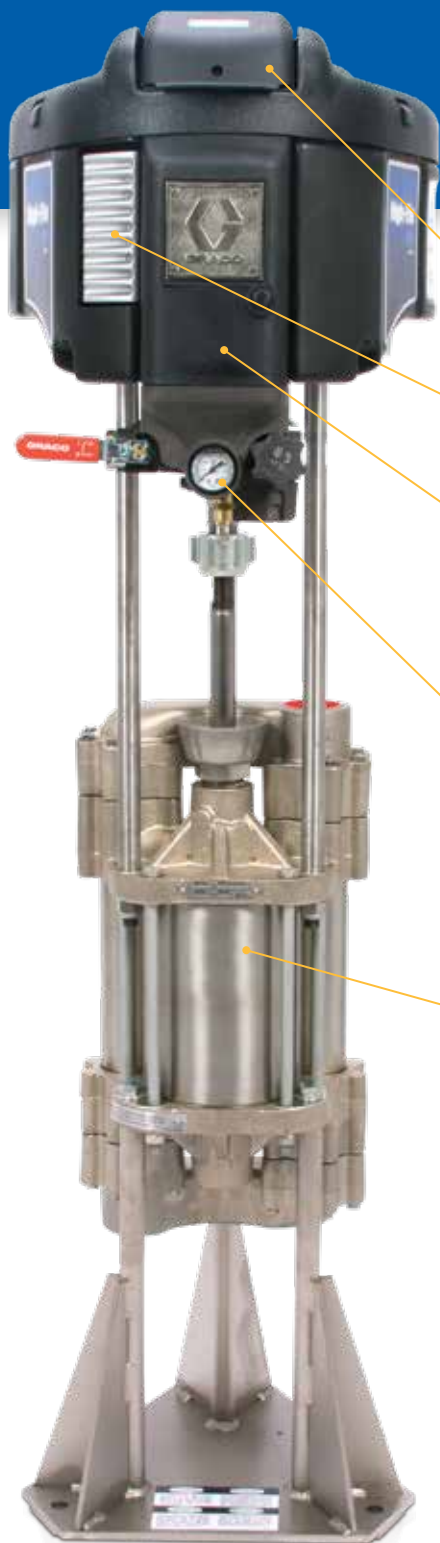
	Part Number	Pressure Rating	Compatible Pumps	Includes			
				Valve	Bung Adapter	Swivel	6 ft Hose
	235998	600 psi (41 bar)	Mini Fire-Ball 225 3:1	112174	191075	155494	238370
	237893	900 psi (62 bar)	Fire-Ball 300 5:1 Fire-Ball 425 6:1	112174	191075	155494	238370
	248296	900 psi (62 bar)	Fire-Ball 300 5:1 Fire-Ball 425 6:1	102527	—	—	109163
	237601	600 psi (41 bar)	Fire-Ball 425 3:1	113053	191075	155494	238370
	240429	1,600 psi (110 bar)	Fire-Ball 425 10:1	102527	191075	155494	238370
	248324	1,600 psi (110 bar)	Fire-Ball 425 10:1	113053	—	—	109163

Tools for Working on Fire-Ball Air Motors

	Part Number	Description
	207579	Padded pliers
	171818	Poppet gauge

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



Move Large Amounts of Oil Fast

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

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

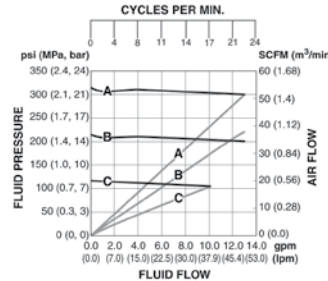
- Fleet service facilities
- In-plant
- Mining

Typical Fluids Handled

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

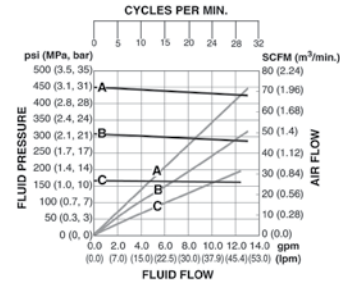
Pump Performance

NXT 3.5:1 High-Flo Pumps



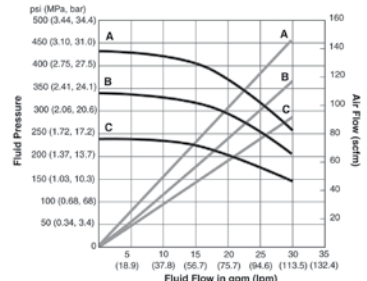
Inlet Air Pressures:
A = 100 psi (6.9 bar)
B = 70 psi (4.8 bar)
C = 40 psi (2.8 bar)
 TEST FLUID:
 No. 10 Weight Oil

NXT 4.5:1 High-Flo Pumps



Inlet Air Pressures:
A = 100 psi (6.9 bar)
B = 70 psi (4.8 bar)
C = 40 psi (2.8 bar)
 TEST FLUID:
 No. 10 Weight Oil

NXT 6:1 High-Flo Pumps



Inlet Air Pressures:
A = 70 psi (4.8 bar)
B = 55 psi (3.7 bar)
C = 40 psi (2.8 bar)
 TEST FLUID:
 No. 10 Weight Oil

Technical Specifications

Fluid Pressure Ratio	3.5:1	4.5:1	6:1
Air Motor Effective Diameter	7.5 in (191 mm)	7.5 in (191 mm)	10.375 in (264 mm)
Maximum Fluid Working Pressure	350 psi (24 bar / 2.4 MPa)	450 psi (31 bar / 3.1 MPa)	500 psi (34 bar / 3.4 MPa)
Output per Cycle	2,000 cc	1,500 cc	2,000 cc
Air Inlet	3/4 in NPT(F)	3/4 in NPT(F)	3/4 in NPT(F)
Fluid Inlet	1-1/2 in NPT(F)	1-1/2 in NPT(F)	2 in NPT(F)
Fluid Outlet	1 in NPT(F)	1 in NPT(F)	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 75 psi (1.4 bar to 5.2 bar)
Maximum Recommended Pump Speed	60 cpm	60 cpm	60 cpm
Cycles per Gallon (Liter)	1.9 (0.5)	2.5 (0.67)	1.9 (0.5)
Wetted Parts	Stainless steel, PTFE, leather, UHMWPE, carbon steel	Stainless steel, PTFE, leather, UHMWPE, carbon steel	Stainless steel, PTFE, leather, UHMWPE, carbon steel
Sound Pressure Level	77 dB(A)	77 dB(A)	80 dB(A)
Sound Power Level	87 dB(A)	87 dB(A)	90 dB(A)
Approximate Weight	99 lb (44.9 kg)	99 lb (44.9 kg)	178 lb (80.7 kg)
Instruction Manuals	System – 312862 Pump – 311211 Pump Lower – 311690 Motor – 311238	System – 312862 Pump – 311211 Pump Lower – 311690 Motor – 311238	System – 312862 Pump – 311831 Pump Lower – 311832 Motor – 311238

Ordering Information

Oil Pump Packages with DataTrak

Package Number with DataTrak	247888	247889	247892	247893
Ratio	3.5:1	4.5:1	6:1	6:1
Mounting	255143 (Wall)	255143 (Wall)	255143 (Wall)	218742 (Stand)
Pump with DataTrak and Thermal Relief Kit	24D590	24D591	24D594	24D594
Output per Cycle	2,000 cc	1,500 cc	2,000 cc	2,000 cc
Output at 60 CPM	31.5 gpm (119.2 lpm)	23.2 gpm (87.8 lpm)	31.5 gpm (119.2 lpm)	31.5 gpm (119.2 lpm)
Motor Size	NXT 3400	NXT 3400	NXT 6500	NXT 6500
Maximum Fluid Pressure	350 psi (24.1 bar)	450 psi (31 bar)	500 psi (35.2 bar)	500 psi (35.2 bar)
Maximum Air Input Pressure	100 psi (6.9 bar)	100 psi (6.9 bar)	75 psi (5.2 bar)	75 psi (5.2 bar)
System Manual	312862	312862	312862	312862
Pump Manual	311211	311211	311831	311831
Pump Lower Manual	311690	311690	311832	311832
Motor Manual	311238	311238	311238	311238
Pump Inlet Size	1-1/2 in NPT	1-1/2 in NPT	2 in NPT	2 in NPT
Pump Outlet Size	1 in NPT	1 in NPT	2 in NPT	2 in NPT
4 ft x 3/4 in Air Hose	110048	110048	110048	110048
6 ft x 1 in Fluid Hose	115042	115042	247969	247969
Instruction Manual	309351	309351	307883	306520

Oil Pump Packages without DataTrak

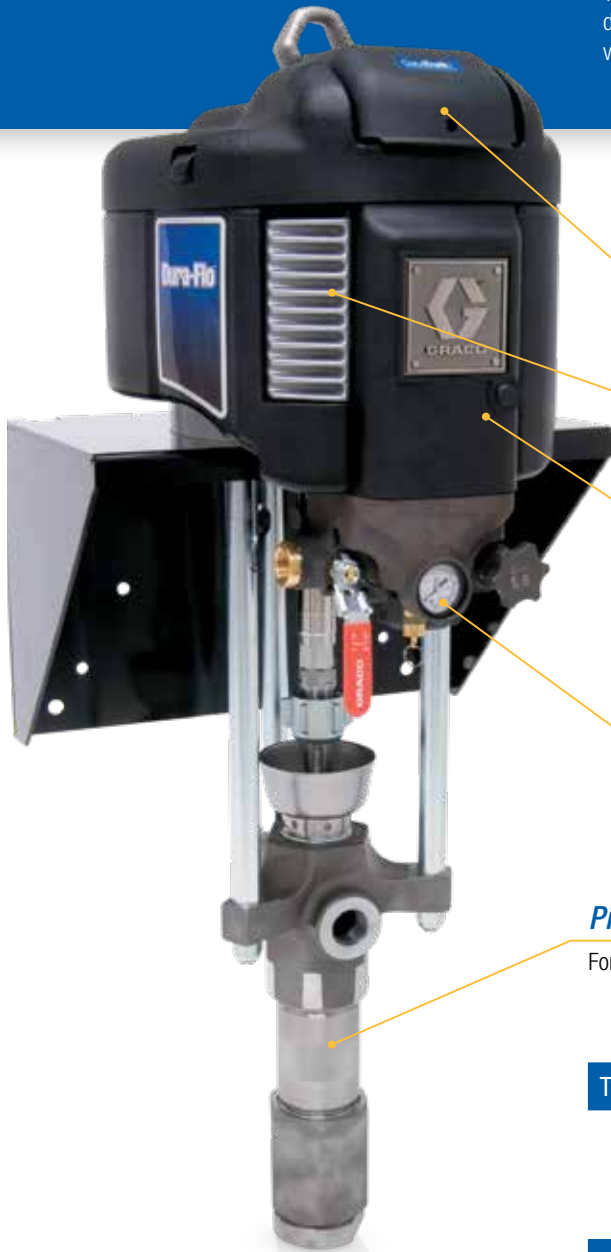
Package Number without DataTrak	24D602	24D603	24D606	24D607
Ratio	3.5:1	4.5:1	6:1	6:1
Mounting	255143 (Wall)	255143 (Wall)	255143 (Wall)	218742 (Stand)
Pump without DataTrak and Thermal Relief Kit	24D596	24D597	24D600	24D600
Output per Cycle	2,000 cc	1,500 cc	2,000 cc	2,000 cc
Output at 60 CPM	31.5 gpm (119.2 lpm)	23.2 gpm (87.8 lpm)	31.5 gpm (119.2 lpm)	31.5 gpm (119.2 lpm)
Motor Size	NXT 3400	NXT 3400	NXT 6500	NXT 6500
Maximum Fluid Pressure	350 psi (24.1 bar)	450 psi (31 bar)	500 psi (35.2 bar)	500 psi (35.2 bar)
Maximum Air Input Pressure	100 psi (6.9 bar)	100 psi (6.9 bar)	75 psi (5.2 bar)	75 psi (5.2 bar)
System Manual	312862	312862	312862	312862
Pump Manual	311211	311211	311831	311831
Pump Lower Manual	311690	311690	311832	311832
Motor Manual	311238	311238	311238	311238
Pump Inlet Size	1-1/2 in NPT	1-1/2 in NPT	2 in NPT	2 in NPT
Pump Outlet Size	1 in NPT	1 in NPT	2 in NPT	2 in NPT
4 ft x 3/4 in Air Hose	110048	110048	110048	110048
6 ft x 1 in Fluid Hose	115042	115042	247969	247969
Instruction Manual	309351	309351	307883	306520



Oil Pumps and Packages

Move Large Amounts of Oil Fast

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.



Optional DataTrak™ Control

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

NXT Air Motor

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

Modular Air Valves

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

Integrated Air Controls

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

Piston Valve with Floating Piston Seal

For maximum pressure balance over a range of material viscosities.

Typical Applications

- Fleet service facilities
- In-plant
- Mining

Typical Fluids Handled

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

Pump Performance

Inlet Pressures:

A

= 100 psi (6.9 bar) air pressure or
1500 (103 bar) hydraulic oil pressure

B

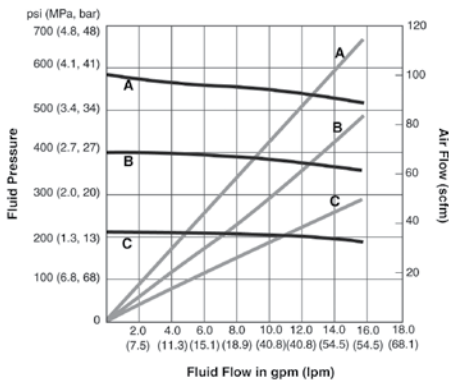
= 70 psi (4.8 bar) air pressure or
1050 (72 bar) hydraulic oil pressure

C

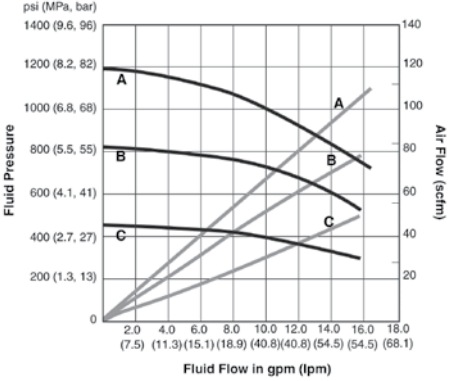
= 40 psi (2.8 bar) air pressure or
600 (41 bar) hydraulic oil pressure

TEST FLUID: No. 10 Weight Oil

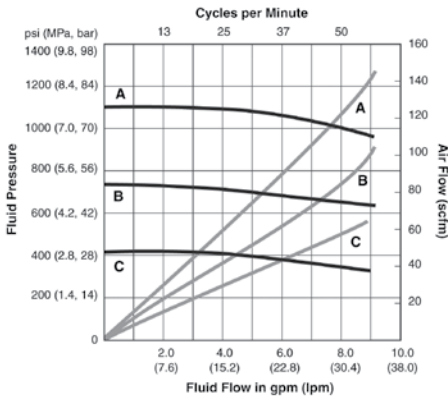
NXT Dura-Flo 6:1 Pumps



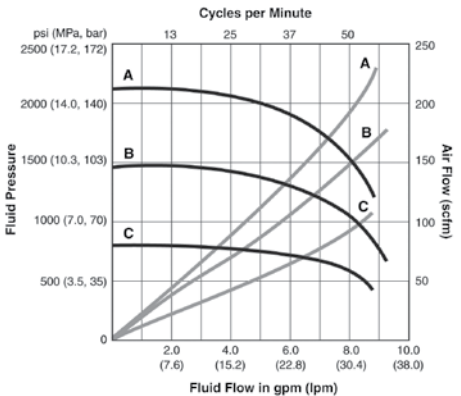
NXT Dura-Flo 10:1 Pumps



NXT Dura-Flo 12:1 Pumps



NXT Dura-Flo 23:1 Pumps



Oil Pumps and Packages

Technical 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



Ordering Information

Oil Pump Packages with DataTrak

Package Number with DataTrak	247890	247894	247891	247895
Ratio	6:1	10:1	12:1	23:1
Mounting	255143 (Wall)	255143 (Wall)	255143 (Wall)	255143 (Wall)
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)

Technical Specifications

Fluid Pressure Ratio	1:1	1:1	1/4:1	1:1 Stainless Steel
Pump Number	224741	224742	236753	237653
Applications	Oil dispensing	Oil dispensing	Bulk oil transfer	Anti-freeze 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 l) 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.

	Part Number	Description
	236864	Dyna-Star fluid controls [1,500 psi (102 bar); 3 gpm (11.4 lpm)]. Includes manifold with pressure-reducing valve, flow-control valve, pressure gauge, shut-off ball valves, and 3 ft (0.9 m) supply and return hoses. Instruction manual 308395.
	237904	1:1 Dyna-Star thermal relief valve, 1,600 psi (110 bar)

Wall-Mounting Brackets

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

Field Proven, Energy Efficient

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



Built-In Reliability

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

Quiet Hydraulic Motor

No need for add-on mufflers.

High-Efficiency Motor

Uses less hydraulic oil.

Typical Applications

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

Typical Fluids Handled

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

Technical 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



Ordering Information

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 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.

	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 l) Metered and Non-Metered Dispensing Packages

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



Package Number	225880	225376	225384	225380	225378*
Fluids Handled	ATF	Gear lube	Gear lube	Gear lube	Gear lube
Package Type	Portable	Portable	Portable	Stationary	Portable
Pump Part Number	204867	204867	204867	204867	204867
Meter Dispense Kit	239707	239705	239705	—	—
Dispense Kit	—	—	—	214658	214658
Fluid Hose	—	—	6 ft x 1/2 in	6 ft x 1/2 in	6 ft x 1/2 in
Drum Cover	204574	204574	204574	204574	204574
Portable Base	203622	203622	—	—	203622
Cart	—	—	203650	—	—
Instruction Manual	306436	306436	306436	306436	306436

*Hydraulic; can be used for gear oil dispensing.

Ordering Information

Pail-Dispensing Package for 5 gal (20 l) 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, anti-freeze	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

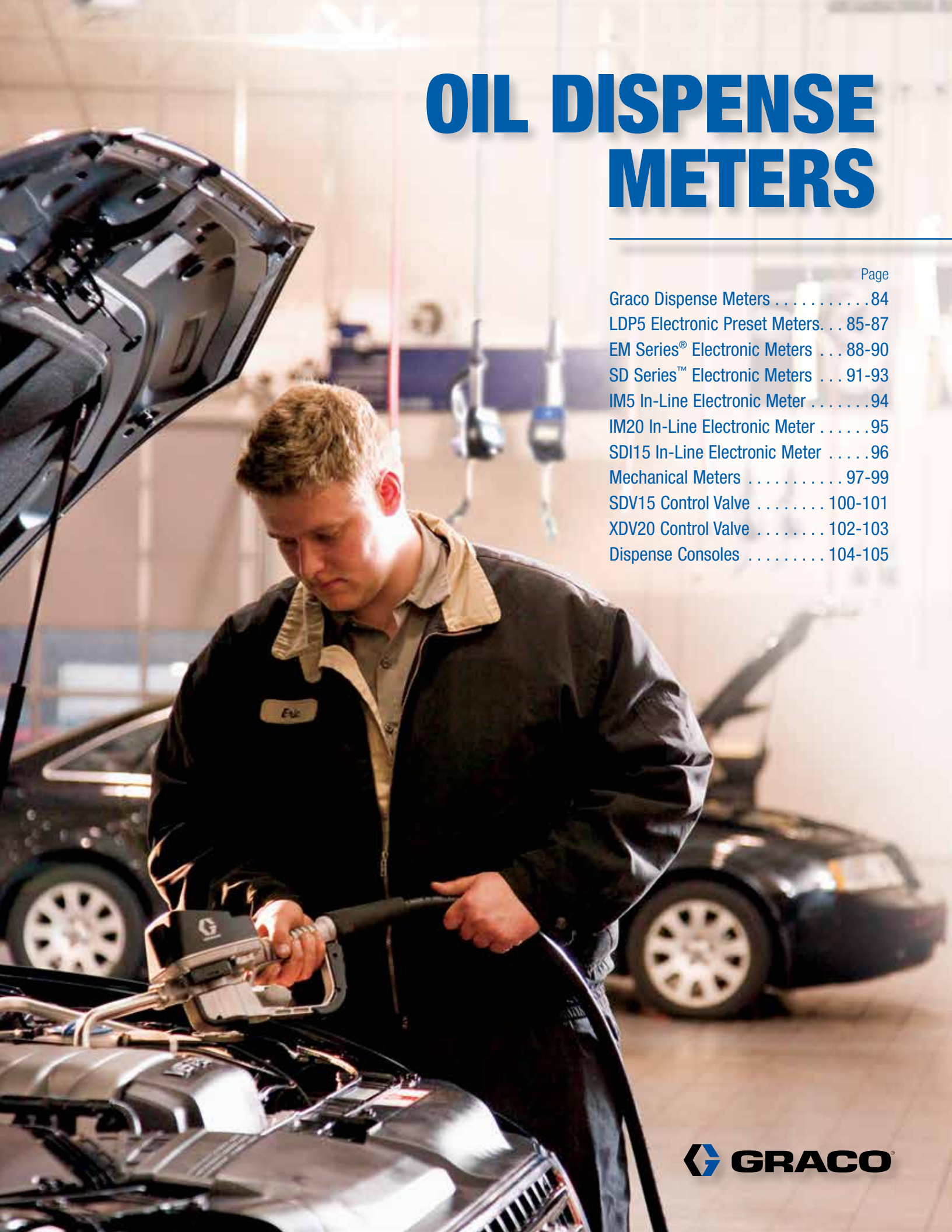
*Drums not included.

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

[illegible]

OIL DISPENSE METERS



Page

Graco Dispense Meters	84
LDP5 Electronic Preset Meters . . .	85-87
EM Series® Electronic Meters . . .	88-90
SD Series™ Electronic Meters . . .	91-93
IM5 In-Line Electronic Meter	94
IM20 In-Line Electronic Meter	95
SDI15 In-Line Electronic Meter	96
Mechanical Meters	97-99
SDV15 Control Valve	100-101
XDV20 Control Valve	102-103
Dispense Consoles	104-105

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) - Anti-freeze	Preset	1,000 psi (69 bar)	5 gpm (19 lpm)	Indoor	5 years overall (2 years electronics)	85-87
EM Series Electronic Meters 	- Petroleum- and synthetic-based oils (motor, gear and ATF) - Anti-freeze	Manual	1,500 psi (103.4 bar)	20 gpm (76 lpm)	Indoor/ Outdoor	5 years overall (3 years electronics)	88-90
SD Series Electronic Meters 	- Petroleum- and synthetic-based oils (motor, gear and ATF) - Anti-freeze	Manual/ Preset	1,500 psi (103.4 bar)	14 gpm (53 lpm)	Indoor/ Limited Outdoor	7 years overall (3 years electronics)	91-93
IM5 In-Line Meters 	- Petroleum- and synthetic-based oils (motor, gear and ATF) - Anti-freeze - Windshield wash fluid	In-Line	500 psi (34 bar)	5 gpm (19 lpm)	Indoor/ Outdoor	5 years overall (2 years electronics)	94
IM20 In-Line Meters 	- Petroleum- and synthetic-based oils (motor, gear and ATF) - Anti-freeze	In-Line	1,500 psi (103.4 bar)	20 gpm (76 lpm)	Indoor/ Outdoor	5 years overall (3 years electronics)	95
SDI15 In-Line Meters 	- Petroleum- and synthetic-based oils (motor, gear and ATF) - Anti-freeze - Diesel exhaust fluid	In-Line	1,500 psi (103.4 bar)	15 gpm (56.8 lpm)	Indoor	7 years overall (3 years electronics)	96
Mechanical Meters 	- Petroleum- and synthetic-based oils (motor, gear and ATF) - Anti-freeze	Manual/ Preset	1,500 psi (103.4 bar)	8 gpm (30 lpm)	Indoor/ Outdoor	5 years	97-99
SDV15 Control Valves 	- Petroleum- and synthetic-based oils (motor, gear and ATF) - Anti-freeze	N/A	1,500 psi (103.4 bar)	15 gpm (56.8 lpm)	Indoor/ Outdoor	7 years	100-101
XDV20 Control Valves 	- Petroleum- and synthetic-based oils (motor, gear and ATF) - Anti-freeze	N/A	1,500 psi (103.4 bar)	20 gpm (76 lpm)	Indoor/ Outdoor	7 years	102-103



LDP5 Electronic Preset Meters

Perfect for Lower-Volume Service Applications

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

Up to
5 gpm
(19 lpm)

Easy-to-Read LCD Screen

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.

Fluid Swivel

1/2 inch fluid inlet.

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)
- Anti-freeze

Technical Specifications

Flow Range*	0.1 gpm to 5 gpm (0.4 lpm to 19 lpm)
Maximum Working Pressure	1,000 psi (69 bar)
Units of Measure	Quarts, pints, gallons, liters (factory set to quarts)
Accuracy**	+/- 0.5%
Inlet	1/2 in NPT
Outlet	1/2 in NPT
Maximum Totalizer	999,999 gallons or liters
Maximum Recorded Dispense	999.9 units
Maximum Preset Volume	999.9 units (LDP5 only)
Operating Temperature Range	32°F to 120°F (0°C to 48.8°C)
Storage Temperature Range	-30°F to 120°F (-34.4°C to 48.8°C)
Outdoor Use	No
Battery	9 volt alkaline
Battery Life	One year
Wetted Parts	SST, nitrile rubber, zinc, CS, LCP
Meter Pressure Loss*	90 psi (6.2 bar) @ 5 gpm (19 lpm)
Dimensions (without extension)	11 in L x 3.25 in W x 3.25 H (28 cm L x 8.3 cm W x 8.3 cm H)
Weight	3 lb (1.36 kg)
Warranty	Five years overall, two years electronics
Instruction Manual	312668

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

**At 2.5 gpm (9.5 lpm) @ 70°F (21°C) with 10 wt. oil and 1 gal (3.8 l) dispensed. May require recalibration. Out-of-box accuracy ±1.25%. Not recommended for in-line installation.

Ordering Information

LDP5 Electronic Preset Meters

Automatic nozzle included

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

Nozzle Extension Kits

	Extension	Fluid	Nozzle Description	Part Number
	Rigid	Oil/Anti-freeze	Automatic, thermally compensating	239949
		Gear lube	Automatic, thermally compensating	239950
		Gear lube	Automatic	238887
	Flexible	Oil/Anti-freeze	Automatic, thermally compensating	239951
	Nozzle Only	Oil/Anti-freeze/Gear lube	Automatic, thermally compensating	239829
		Oil/Anti-freeze/Gear lube	Automatic	238371

Ordering Information

EM5/PM5 to LD Series Upgrade Kits

	Part Number	Description
	257350	EM5 to LDM5
	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
	191294	Black
	191287	Red
	191288	Blue
	191289	Green
	191295	Yellow

Hose Identification Wraps

Vinyl hose wrap for easy identification of meter fluid.

	Part Number	Description
	17S659	Red
	17S660	Blue
	17S661	Green
	17S662	Yellow
	17S663	White

EM® Series Electronic Manual Dispense Meters



**Up to
20 gpm**
(76 lpm)

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 Dispenes

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, anti-freeze 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)
- Anti-freeze

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 (102 bar)	
Unit of Measure	Quarts, gallons, 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 steel, 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 electronics and 1 year wear parts	
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.



EM[®] Series Electronic Manual Dispense Meters

Ordering Information

		Extension	Inlet in (mm)	Part Number
EM8		Flexible	1/2 (13)	25C904
		Rigid		25C903
		Gear		25C905
EM20		Flexible	1/2 (13)	25C915
			3/4 (19)	25C918
		Rigid	1/2 (13)	25C916
			3/4 (19)	25C919

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

Ordering Information

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

Hose Identification Wraps

Vinyl hose wrap for easy identification of meter fluid.

	Part Number	Description
	17S659	Red
	17S660	Blue
	17S661	Green
	17S662	Yellow
	17S663	White

Nozzle and Extension Kits

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



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.

Up to
18 gpm
(68 lpm)

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™ FC and upgradeable to Pulse™ 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)
- Anti-freeze
- Windshield wash

Technical 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.

Ordering Information

SD Electronic Meters

	Dispense Type	Flow Range gpm (lpm)	Fluid	Extension	Inlet in (NPT)	Part Number
 26C384	Preset (Pulse FC-enabled)	0.25–8 (1–30)	Oil	Rigid	1/2	26C384
				Flexible	1/2	26C354
			Anti-freeze	Rigid	1/2	26C385
				Flexible	1/2	26C355
			Gear lube	Rigid	1/2	26C358
 25M406	Preset (Pulse FC-enabled)	0.25–18 (1–68)	Oil	Flexible	1/2	26C357
				Flexible	3/4	26C361
				Rigid	3/4	26C360
				Rigid	1/2	26C356
 25M406	Manual	0.25–8 (1–30)	Oil	Flexible	1/2	25M406
				Rigid	1/2	25M404
			Anti-Freeze	Flexible	1/2	25M407
				Rigid	1/2	25M405
			Gear Lube	Rigid	1/2	25M413
 25M410	Manual	0.25–18 (1–68)	Oil	Windshield Wash	Rigid	25M415
				Flexible	1/2	25M417
				Rigid	3/4	25M416
				Flexible	1/2	25M411
				Rigid	1/2	25M410

Nozzle and Extension Kits

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

Ordering Information

Filter Kits for SD Series Meters

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

Swivel Covers

	Part Number	Description
	15T366	Black
	15T367	Red
	15T368	Blue
	15T369	Green
	15T370	Yellow

Impact Protection

	Part Number	Description
	131226	Pulse/SD meter boot

Hose Identification Wraps

Vinyl hose wrap for easy identification of meter fluid.

	Part Number	Description
	17S659	Red
	17S660	Blue
	17S661	Green
	17S662	Yellow
	17S663	White

IM5 In-Line Electronic Meter



Up to
5 gpm
(19 lpm)

Easy Battery Replacement

Operates on single 9V alkaline battery.

Tracks Totals in Two Modes

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

Heavy-Duty Construction

For indoor or outdoor use.

Easy-to-Read LCD

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



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)
- Anti-freeze
- Windshield washer fluid

Technical Specifications

Flow Range*	0.5 gpm to 5 gpm (1.9 lpm to 19 lpm)
Maximum Working Pressure	500 psi (34 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	Yes
Battery	9-volt, alkaline
Wetted Parts	Nickel, zinc, zenite, nitrile rubber
Meter Pressure Loss*	25 psi (1.7 bar) @ 5 gpm (19 lpm)
Dimensions	4.25 in L x 3.25 in W x 2.0 in H (10.8 cm L x 8.3 cm W x 5.1 cm H)
Weight	1.8 lb (0.8 kg)
Warranty	Five years overall, two years electronics
Instruction Manual	308687

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

**Display shows quantity in 0.01 increments up to 999.99 gallons, quarts, pints or liters. Totalizes in gallons or liters up to 99,999 units.

Ordering Information

Meter

Part Number	Description
239824	IM5 low pressure – low-flow in-line meter

Accessory

	Part Number	Description
	239876	Strainer kit



IM20 Electronic In-Line Meter

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.

Up to
20 gpm
(76 lpm)

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)
- Anti-freeze

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

SDI15 In-Line Electronic Meter



Up to
15 gpm
(57 lpm)



Energy Efficient

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.

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.

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)
- Anti-freeze
- Windshield washer fluid
- Diesel exhaust fluid

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)
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, anti-freeze 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)

Accurate Dispensing for a Wide Variety of Vehicle or Machine Service Applications

Ideal for indoor or outdoor use in all size shops.

Up to
8 gpm
(30.2 lpm)

Impact-Resistant Shroud

Resists scratches and protects knob and dial from damage.

Simple, Easy Design

Dial and face design is easy to read and set.

Fluid Swivel

1/2 inch fluid inlet.

Fluid Extension Kits

Choose from rigid or flexible with automatic thermal compensating nozzle.

Built-In Totalizer

Helps manage material usage.

Durable Cast Housing

Durable aluminum body is balanced and lightweight with comfortable grip.

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)
- Anti-freeze

Technical Specifications

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

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

Ordering Information

Manual Meters

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

Manual Meter Packages

	Extension	Model Description	Part Number	Replacement Nozzle/Extension Kit
	Flexible	4/16 Liter	24V043	255853
		4/16 Quart	24V034	255853
	Rigid	4/16 Liter	24V046	255852
		4/16 Quart	24V037	255852
	Gear Lube	4/16 Liter	24V049	255854
		4/16 Quart	24V040	255854

Preset Meters

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

Ordering Information

Preset Meter Packages

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

Nozzle Extensions

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

Accessories

	Part Number	Description
	256164	Strainer filter kit, 10-pack

SDV15 Control Valve



Up to
15 gpm
(76 lpm)

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)
- Anti-freeze

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

	Fluid	Extension	Inlet in (mm)	Part Number
	Oil/Anti-freeze	Rigid	1/2 (13)	247712
		Flexible		247713
	Gear	Gear		247714

SDV15 Bare Control Valve

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

High Flow Nozzles with Extension

	Extension	Part Number
	Rigid	255857
	Flexible	255858

Filter Kit

	Description	Part Number
	Strainer filter kit	256164

Quick Close Nozzle

Extension sold separately.

	Fluid	Part Number
	Oil/Anti-freeze	17T207
	Gear lube	255470
	Oil/Anti-freeze (high-flow)	255461

XDV20 Control Valve



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.

Up to
20 gpm
(76 lpm)

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)
- Anti-freeze

Technical Specifications

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

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

Ordering Information

XDV20 Control Valve

Includes high flow, quick-close nozzle.

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

XDV20 Bare Control Valve

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

Accessories

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

Meter Dispense Consoles

Ordering Information

Lubricant Dispense Consoles

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

	Part Number	Description	Package Includes	
			Dispense Valve Brackets (qty)	Water Bib Brackets (qty)
	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
	196471	Dispense valve bracket for LDP5, EM8 and EM20 meters
	249440	Dispense valve bracket for SD/Matrix meters

» Ordering Information

Oil Dispense Bar

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

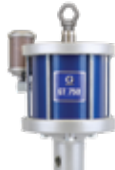
[illegible]

GREASE PUMPS

	Page
Grease Pump Selection Guide	108-109
LD Series™ Grease Pumps	110-114
LD Series™ Grease Pump Accessories	115-116
Mini Fire-Ball® 225 Grease Pumps	117-120
Fire-Ball® 300 Grease Pumps	121-128
Fire-Ball® 425 Grease Pumps	129-135
Grease Pump Accessories	136-139
GT 750 36:1 Grease Pumps	140-141
NXT™ Check-Mate® Grease Pumps	142-146
Dyna-Star® Hydraulic Grease Pumps	147-148
Viscount® II Grease Pumps	149-150
Manually-Operated Grease Pumps	151



Grease Pump Selection Guide

Pump Family and Fluid Pressure Ratio	Typical Applications	Annual Usage	Line Length	Simultaneous Dispense Points	Approx. Free Flow Rate @ 100 psi	Air Inlet	Fluid Outlet	Air Operation Range	Reference Page
LD, 50:1 	- Automotive dealerships - Fast lube centers - Lube trucks - Lubricant transfer - Service shops	Up to 7,000 lbs (3,175 kg)	Up to 100 (30.5 m)	1	4.5 lbs/min (2 kg/min)	1/4 in NPT(F)	1/4 in NPT(F)	20-150 psi (1.37-10.3 bar)	110-116
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)	117-120 135-138
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)	121-123 135-138
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)	121-132 124-128 135-138
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)	129-130 136-139
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)	129-131 133-139
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)	40-100psi (2.8-7 bar)	129-130 132-139
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)	40-100psi (2.8-7 bar)	140-141

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)	142-143 145-146
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)	142-143 146
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)	142-143 146
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)	142 144-146
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)	142 144-146
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)	142 144-146

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)	7500 psi (517 bar)	3/8 in NPT(F)	3/4 in NPT(F)	1/2 in NPT(F)	1500 psi (102 bar)	147-148
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)	7500 psi (517 bar)	3/4 in -16 JIC (37° Flare)	3/4 in NPT(F)	1/2 in NPT(F)	600 psi (41 bar)	147-148
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)	2300 psi (159 bar)	3/4 in NPT(F)	1 in NPT(F)	1-1/2 in NPT(F)	1500 psi (102 bar)	149-150

LD Series™ 50:1 Grease Pumps



**5 Year
Warranty!**

Durable and hardworking

Stay ahead of the competition with LD Series pumps. These affordable and full-featured pumps are designed for lower-volume (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

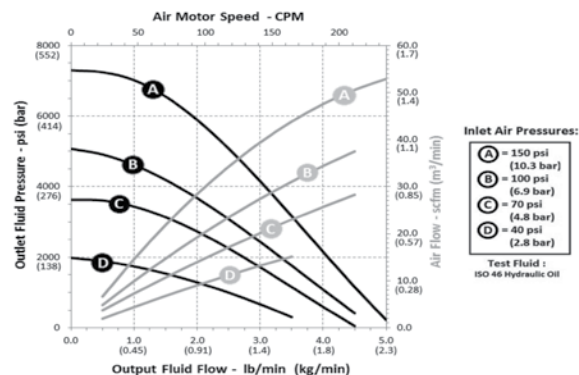
- Automotive dealerships
- Fast lube centers
- Service shops
- Lube trucks

Typical Fluids Handled

- Grease up to NLGI #2

Pump Performance

LD Series 50:1 Pumps





Technical Specifications

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

Ordering Information

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

Ordering Information

35 lb Grease Packages



Package Number	24J030	26C169	25C549
Ratio	50:1	50:1	50:1
Type of Package	Stationary	Stationary	Mobile
Container Size	35 lb (16 kg)	35 lb (16 kg)	35 lb (16 kg)
Pump Part Number	24G600	24G600	24G600
Hose Kit	24H862	—	24H862
Hose Sizes	Grease 1/4 in ID x 6 ft (1.8 m) Air/Water 3/8 in ID x 6 ft (1.8 m)	Grease – Whip 1/8 in x 1/8 in x 30 in (0.8 m) Grease 1/4 in x 3/8 in x 20 ft (6.1 m)	Grease 1/4 in ID x 6 ft (1.8 m) Air/Water 3/8 in ID x 6 ft (1.8 m)
Follower Plate	24F901	24F901	24F901
Drum Cover	24F904	24F904	24F904
Grease Valve	129581	129581	129581
Z-Swivel	129591	129591	129591
Fitting(s)	—	157705	—
Air Regulator	—	24H420	—
Air Filter	—	106148	—
Portable Base	—	—	131183
Instruction Manual	3A1335	3A1335	3A1335



Ordering Information

120 lb Grease Packages

Package Number	24J036	26C170	25C548	24J048	24J060	25N618
Ratio	50:1	50:1	50:1	50:1	50:1	50:1
Type of Package	Stationary	Stationary	Mobile	Mobile	Mobile	Mobile
Container Size	120 lb (54 kg)	120 lb (54 kg)	120 lb (54 kg)	120 lb (54 kg)	120 lb (54 kg)	120 lb (54 kg)
Pump Part Number	24G603	24G603	24G603	24G603	24G603	24G603
Hose Kit	24H862	—	24H862	24H862	24J501	—
Hose Sizes	Grease 1/4 in ID x 6 ft (1.8 m) Air/Water 3/8 in ID x 6 ft (1.8 m)	Grease – Whip 1/8 in x 1/8 in x 30 in (0.8 m) Grease 1/4 in x 3/8 in x 20 ft (6.1 m)	Grease 1/4 in ID x 6 ft (1.8 m) Air/Water 3/8 in ID x 6 ft (1.8 m)	Grease 1/4 in ID x 6 ft (1.8 m) Air/Water 3/8 in ID x 6 ft (1.8 m)	Grease 1/4 in ID x 6 ft (1.8 m) Air/Water 3/8 in ID x 6 ft (1.8 m)	Grease 1/4 in ID x 12 ft (3.7 m)
Follower Plate	24F902	24F902	24F902	24F902	24F902	24F902
Drum Cover	24F905	24F905	24F905	24F905	24F905	24F905
Grease Valve	129581	129581	129581	129581	129581	129581
Z-Swivel	129591	129591	129591	129591	129591	129591
Fitting(s)	—	157705	—	—	—	165198 / 169970
Air Regulator	—	24H420	—	—	—	24H420
Air Filter	—	106148	—	—	—	—
Portable Base	—	—	131184	24H422	24H422	131184
Hose Reel	—	—	—	—	LD	—
Hose Size	—	—	—	—	1/4 in x 35 ft	—
Hose Reel Part Number	—	—	—	—	24H663	—
Instruction Manual	3A1335	3A1335	3A1335	3A1335	3A1335	3A1335

Ordering Information

400 lb Grease Packages



Package Number	24J042	26C171	24J054	24J066
Ratio	50:1	50:1	50:1	50:1
Type of Package	Stationary	Stationary	Mobile	Mobile
Container Size	400 lb (180 kg)	400 lb (180 kg)	400 lb (180 kg)	400 lb (180 kg)
Pump Part Number	24G606	24G606	24G606	24G606
Hose Kit	24H862	—	24H862	24J501
Hose Sizes	Grease 1/4 in ID x 6 ft (1.8 m) Air/Water 3/8 in ID x 6 ft (1.8 m)	Grease – Whip 1/8 in x 1/8 in x 30 in (0.8 m) Grease 1/4 in x 3/8 in x 20 ft (6.1 m)	Grease 1/4 in ID x 6 ft (1.8 m) Air/Water 3/8 in ID x 6 ft (1.8 m)	Grease 1/4 in ID x 6 ft (1.8 m) Air/Water 3/8 in ID x 6 ft (1.8 m)
Follower Plate	24F903	24F902	24F903	24F903
Drum Cover	24F906	24F905	24F906	24F906
Grease Valve	129581	129581	129581	129581
Z-Swivel	129591	129591	129591	129591
Fitting(s)	—	157705	—	—
Air Regulator	—	24H420	—	—
Air Filter	—	106148	—	—
Type of Reel	—	—	—	LD
Reel Size	—	—	—	1/4 in x 35 ft
Reel Part Number	—	—	—	24H663
Portable Base	—	—	24F915	24F915
Instruction Manual	3A1335	3A1335	3A1335	3A1335

LD Pro-Shot™ Non-Metered Grease Valves



- Rugged design for harsh environments
- Pressure-assisted trigger for ease of operation
- Easy adjustment with top locking nut
- 6 in steel extension with heavy-duty coupler

Technical Specifications

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

Ordering Information

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

LD Z-Swivel



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

Technical Specifications

Pressure	6,000 psi (413 bar / 41.3 MPa)
Inlet Size	1/4 in

Ordering Information

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

Ordering Information

Adjustable Bung Adapter

	Part Number	Description
	24P623	Adjustable bung adapter for LD pumps

Air Regulators

	Part Number	Description
	24H420	Mini self-relieving air regulator with gauge, 1/4 in NPT x 3/8 in npsm

Carts

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

Follower Plates

	Part Number	Description
	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

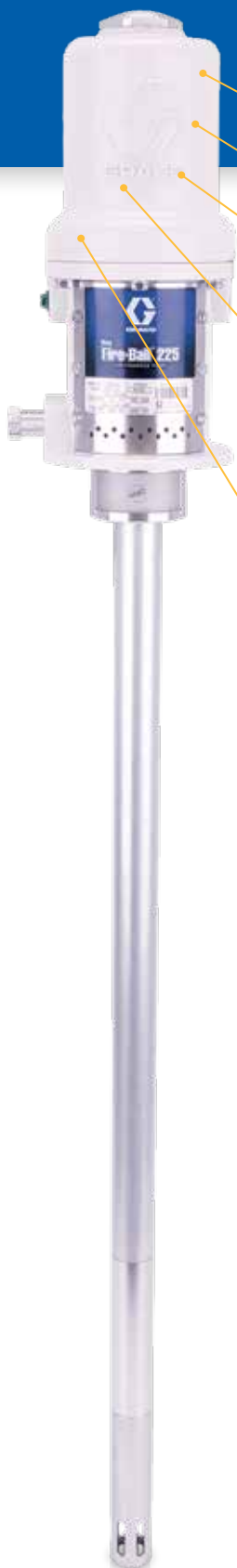
Hose and Fitting Kits

	Part Number	Description	Includes				
			Grease Hose	Grease Hose Size	Air Hose	Air Hose Size	Fitting
	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
	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

**7 Year
Warranty!**

**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

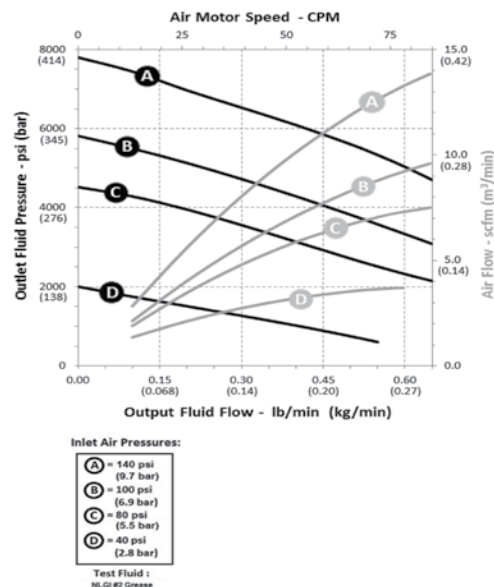
- Automotive dealerships
- Fast lube centers
- Service shops
- Heavy-duty dealerships
- Fleet services facilities
- In-plant
- Lube trucks
- Mining

Typical Fluids Handled

- Grease up to NLGI #2

Pump Performance

Mini Fire-Ball 225 Pumps



Technical 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



Ordering Information

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 (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
Pump 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
Dispense Hose Kit		236058	236058	236058
Dispense Kit Includes	12 ft Hose	109151	109151	109151
	Air Coupler	114558	114558	114558
	Air Fitting	169971	169971	169971
	Z-Swivel	202577	202577	202577
	Pro-Shot Valve	242056	242056	242056
Follower Plate		24F901	**	**
Drum Cover		222059	24R350	24R350
Portable Base		—	—	203650
Instruction Manual		309967	309967	309967

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

**Order follower plate (220653) separately for 35 lb (16 kg) pails or (220654) for 70 lb (32 kg) bulk.



246911

Ordering Information

120 lb and 400 lb Grease Packages



Package Number	246914*	246915*	246916*	246917*
Ratio	50:1	50:1	50:1	50:1
Type of Package	Stationary supply package	Portable package with caster base	Portable package with 2-wheel cart	Stationary supply package
Container Size	120 lb (55 kg)	120 lb (55 kg)	120 lb (55 kg)	400 lb (180 kg)
Pump Part Number	246780	246780	246780	246781
Fluid Hose Size	1/4 in x 6 ft	1/4 in x 12 ft	1/4 in x 12 ft	1/4 in x 6 ft
Dispense Hose Kit	222072	236058	236058	222072
Dispense Kit Includes	12 ft Hose	—	109151	—
	6 ft Hose	109150	—	109150
	6 ft Coupled Hose	203320	—	203320
	Air Coupler	—	114558	—
	Air Fitting	—	169971	—
	Z-Swivel	—	202577	—
	90° Fitting(s)	155494 / 155541	—	155494 / 155541
	Pro-Shot Valve	—	242056	—
Follower Plate	24F902	24F902	24F902	24F903
Drum Cover	24R350	24R350	24R350	200326
Portable Base	—	203622	203650	—
Instruction Manual	309967	309967	309967	309967

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

**7 Year
Warranty!**

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

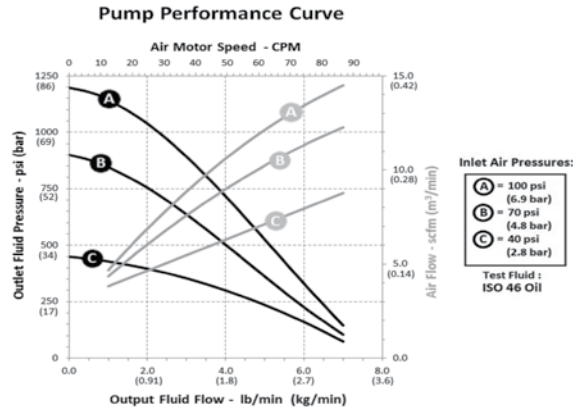
- Automotive dealerships
- Fast lube centers
- Service shops
- Heavy-duty dealerships
- Fleet services facilities
- In-plant
- Lube trucks
- Mining

Typical Fluids Handled

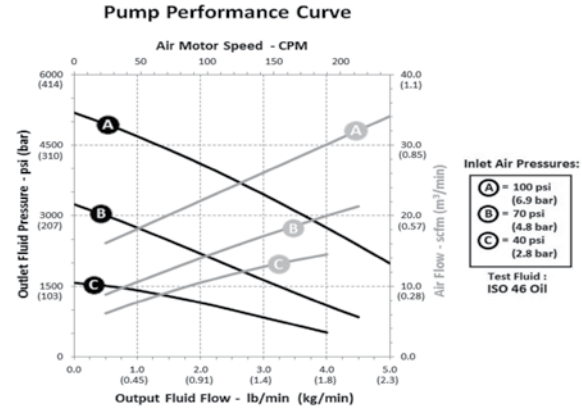
- Grease up to NLGI #2

Pump Performance

Fire-Ball 300 15:1 Pumps



Fire-Ball 300 50:1 Pumps



Technical Specifications

	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/min)
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

Ordering Information

15:1 Grease Pump Packages



Package 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)
Pump Part Number		206405	206699	206700
Dispense Kit		222080	222081	222081
Dispense Kit Includes	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
	Air Fitting	–	169971	169971
	Closed Nipple	156849	156849	156849
	Z-Swivel	202577	202577	202577
	Fitting(s)	169971	–	–
	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
Instruction Manual		307882	307882	307882

Ordering Information

50:1 25 to 50 lb Grease Pump Packages



Package Number		222069*	245694*	225827*	225773*	245695*	226012*
Type of Package		Portable pail dispenser	Portable pail dispenser	Stationary pail dispenser	Cart-mounted pail dispenser	Cart-mounted pail dispenser	Cart-mounted pail topper
Ratio		50:1	50:1	50:1	50:1	50:1	50:1
Container Size		25 lb to 50 lb (11 kb to 23 kg)	25 lb to 50 lb (11 kb to 23 kg)	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)	50 lb (23 kg)
Pump Part Number		239877	239877	239877	239877	239877	239877
Dispense Kit		222070	245697	222070	222070	245697	222070
Dispense Kit Includes	Fluid Hose	1/4 in x 12 ft	1/4 in x 12 ft	1/4 in x 12 ft	1/4 in x 12 ft	1/4 in x 12 ft	1/4 in x 12 ft
	Hose Part Number	109151	109151	109151	109151	109151	109151
	Air Coupler	114558	114558	114558	114558	114558	114558
	Air Fitting	169971	169971	169971	169971	169971	169971
	Z-Swivel	202577	202577	202577	202577	202577	202577
	Dispenser	Pro-Shot	Accu-Shot	Pro-Shot	Pro-Shot	Accu-Shot	Pro-Shot
	Dispenser Part Number	242056	233807	242056	242056	233807	242056
Follower Plate		24F901	220653	**	**	**	—
Drum Cover		222059	222059	24R350	24R350	204574	—
Holster		—	—	203976	203976	203976	203976
Container		—	—	204134	204134	204134	—
Portable Base		—	—	—	203650	203650	203650
Elevator		—	—	—	—	—	203664
Inductor Plate		—	—	—	—	—	204351
Instruction Manual		307878	307878	307878	307878	307878	307878

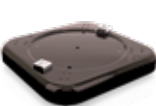
*Use 3/8 in (9.5 mm) air regulator (109075); must be ordered separately.

**Order follower plate 220654 separately, if needed.



Ordering Information

50:1 120 lb Grease Pump Packages

							
							
Package Number		225006*	225026*	26C185*	26C186*	245696*	222245*
Type of Package		Portable with caster base	Portable with 2-wheel cart	Portable with caster base	Portable with 2-wheel cart	Portable with 2-wheel cart	Portable with heavy duty cart
Ratio		50:1	50:1	50:1	50:1	50:1	50:1
Container Size		120 lb (55 kg)	120 lb (55 kg)	120 lb (55 kg)	120 lb (55 kg)	120 lb (55 kg)	120 lb (55 kg)
Pump Part Number		239887	239887	239887	239887	239887	239887
Dispense Kits		222070	222070	26C183	26C183	245697	222383
Dispense Kit Includes	Fluid Hose	1/4 in x 12 ft	1/4 in x 12 ft	1/4 in x 12 ft	1/4 in x 12 ft	1/4 in x 12 ft	1/4 in x 25 ft
	Hose Part Number	109151	109151	109151	109151	109151	109154
	6 ft Coupled Hose	—	—	—	—	—	—
	Air Coupler	114558	114558	114558	114558	114558	114558
	Air Fitting	169971	169971	169971	169971	169971	169971
	Z-swivel	202577	202577	202577	202577	202577	202577
	Fitting(s)	—	—	—	—	—	—
	Dispenser	Pro-Shot	Pro-Shot	Pro-Shot	Pro-Shot	Accu-Shot	Pro-Shot
	Dispenser Part Number	242056	242056	26C184	26C184	233807	242056
Fluid Hose Size		See kit above	See kit above	See kit above	See kit above	See kit above	See kit above
Air Hose Size		—	—	—	—	—	—
Meter		See kit above	See kit above	See kit above	See kit above	See kit above	See kit above
Meter Part Number		See kit above	See kit above	See kit above	See kit above	See kit above	See kit above
Follower Plate		24F902	24F902	24F902	24F902	220654	24F902
Drum Cover		24R350	24R350	24R350	24R350	204574	222060
Holster		203976	203976	203976	203976	203976	—
Portable Base		203622	203650	203622	203650	203650	222243
Elevator		—	—	—	—	—	—
Pump Support		—	—	—	—	—	—
Hold Down Kit		—	—	—	—	—	222061
Instruction Manual		307878	307878	307878	307878	307878	307878

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

Ordering Information

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)
Pump Part Number		239887	239887
Dispense Kits		222072	—
Dispense Kit Includes	Fluid Hose	1/4 in x 6 ft	—
	Hose Part Number	109150	—
	6 ft Coupled Hose	203320	—
	Air Coupler	—	—
	Air Fitting	—	—
	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

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)
Pump Part Number		239888	239888
Hose and Fitting Kits		222072	204467
Dispense Kit Includes	Fluid Hose	1/4 in x 6 ft	1/4 in x 6 ft
	Hose Part Number	109150	109150
	6 ft Coupled Hose	203320	—
	Fitting(s)	155494/155541	100206/156971/205528
Air Hose Size		3/8 in x 6 ft	3/8 in x 6 ft
Follower Plate		24F903	—
Drum Cover		200326	—
Elevator		—	204385
Pump Support		—	204461
Inductor Plate		—	204353
Base		—	205339
Instruction Manual		307880	306556

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

Ordering Information

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)
Pump Part Number	239887	239888
Dispense Kits	222072	222072
Dispense Kit Includes	Fluid Hose	1/4 in x 6 ft
	Hose Part Number	109150
	6 ft Coupled Hose	203320
	Fitting(s)	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
Instruction Manual	307880	307880

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

Ordering Information

50:1 Grease Pump Side Pocket and Horizontal Mount Packages



Package Number	244644	244645
Type of Package	Side Pocket Mount	Horizontal Mount
Ratio	50:1	50:1
Pump Part Number	239888	239877
Dispense Kits	222072	222072
Dispense Kit Includes	Fluid Hose	1/4 in x 6 ft
	Hose Part Number	109150
	6 ft Coupled Hose	203320
	Fitting(s)	155494/155541
Air Hose Size	3/8 in x 6 ft	3/8 in x 6 ft
Pump Mount Bracket	3 in (f) Coupler – 512874	3 in (f) Coupler – 512874
Air Regulator	109075	109075
Air Shut-Off Valve	110224	110224
Installation Kit	948393	948393
Instruction Manual	309350	309350

**10 Year
Warranty!**

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.



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

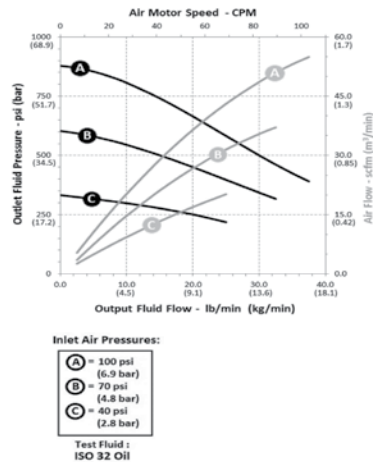
- Automotive dealerships
- Fast lube centers
- Service shops
- Heavy-duty dealerships
- Fleet services facilities
- In-plant
- Lube trucks
- Mining

Typical Fluids Handled

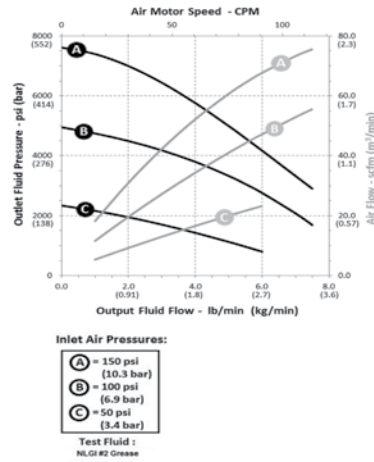
- Grease up to NLGI #2

Pump Performance

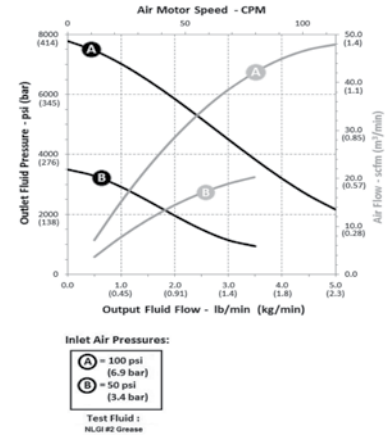
Fire-Ball 425 10:1 Pumps



Fire-Ball 425 50:1 Pumps



Fire-Ball 425 75:1 Pumps



Technical 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/min)
Air Inlet	1/2 in NPT(F)	1/2 in NPT(F)	1/2 in NPT(F)
Fluid Outlet	1 in NPT(F)	3/8 in NPT(F)	3/8 in NPT(F)
Air Operation Range	40 psi to 180 psi (2.8 bar to 12.5 bar)	40 psi to 150 psi (2.8 bar to 10.4 bar)	40 psi to 100 psi (2.8 bar to 7 bar)
Max Recommended Pump Speed	60 cpm	60 cpm	60 cpm
Cycles per Pound	2.75 cpp	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).

Ordering Information

50:1 120 lb and 400 lb Grease Pump Packages



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

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

Ordering Information

75:1 120 lb and 400 lb Grease Pump Packages



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

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



Ordering Information

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

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

*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.

Ordering Information

Grease Pump RAM Packages

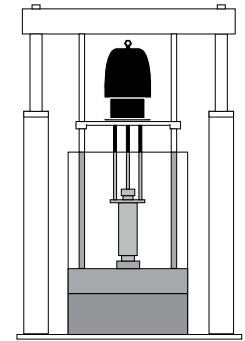


Package Number	244905	244906
Type of Package	Stationary Ram	Stationary Ram
Ratio	50:1	75:1
Container Size	400 lb (180 kg)	400 lb (180 kg)
Pump Part Number	Fire-Ball 425 – 205395	Fire-Ball 425 – 239730
Dispense Kits	222076	222076
Dispense Kit Includes	Fluid Hose	3/8 in x 6 ft
	Hose Part Number	109163
	6 ft Coupled Hose	205418
	Fitting(s)	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
Ram Plate Seal Kit	247335	247335
Pump Mount Kit	247337	247337
Instruction 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



Ordering Information

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



				
Package Number		244646	244647	244648
Type of Package		Side Pocket Mount	Side Pocket Mount	Horizontal Mount
Ratio		50:1	75:1	75:1
Pump Part Number		205395	239730	239731
Dispense Kits		222076	222076	222076
Dispense Kit Includes	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
	6 ft Coupled Hose	205418	205418	205418
	Fitting(s)	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
Pump Mount Bracket		3 in (f) Coupler – 512874	3 in (f) Coupler – 512874	3 in (f) Coupler – 512874
Air Regulator		244844	244844	244844
Air Shut-Off Valve		110225	110225	110225
Installation Kit		948392	948392	948392
Instruction Manual		309350	309350	309350

Ordering Information

Air Regulators

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

Bleed-Type Air Shut-Off Valves

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

Bung Adapters

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

Dispense Hose and Fitting Kits

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

Hose and Fitting Kits

	Part Number	Pressure Rating	Compatible Pumps	Includes			
				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

Ordering Information

Drum Covers

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

Drum Elevator

	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

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

Ordering Information

Follower Plates

	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

Ordering Information

Portable Bases

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

Carts

	Part Number	Description	Compatible Container Size
	203650	Drums fit onto recess on formed base. Rim clamps secure drum onto cart.	35 lb (16 kg) 70 lb (32 kg) 120 lb (55 kg)
	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

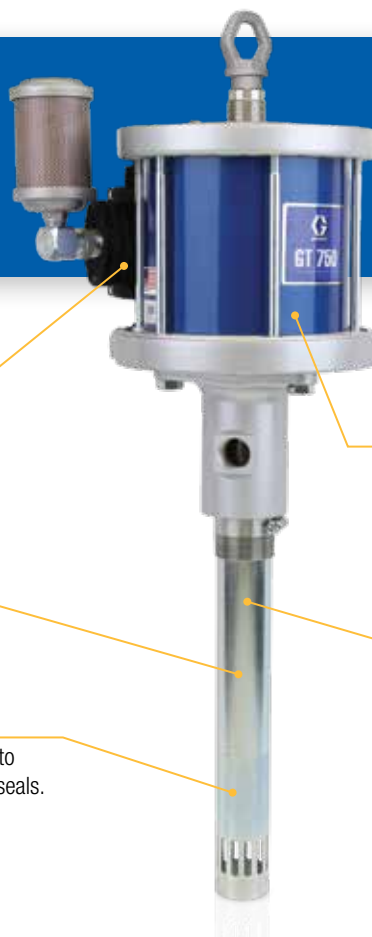
	Part Number	Description
	242055	1/4 in NPT(F) inlet without coupler or extension
	242056	1/4 in NPT(F) inlet with coupler and extension 200389
	242057	3/8 in NPT(F) inlet without coupler or extension
	242058	3/8 in NPT(F) inlet with coupler and extension 200389
	224872	Includes 30 in (76.2 cm) whip hose (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.



Up to
32 lb/min
(13.6 kg/min)

Efficient Air Motor

Use less air to move more grease.

Proven Pump Technology

Based on Graco NXT™ pump technology.

High Flow Rates

Up to 32 lb/min of grease.

Multiple Tank Options

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

High Volume Per Stroke

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

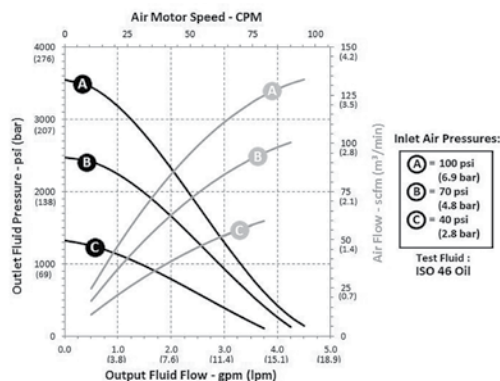
Typical Applications

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

Typical Fluids Handled

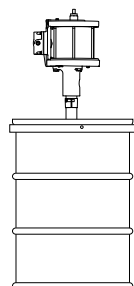
- Grease up to NLGI #2

Pump Performance



Technical Specifications

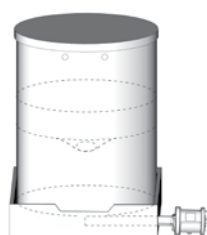
Fluid Pressure Ratio	36:1
Air Pressure Operating Range	40-100 psi (3-7 bar)
Maximum Working Pressure	3,600 psi (248 bar)
Maximum Recommended Continuous Pump Speed	60 cycles per minute
Air Motor Effective Diameter	7.5 in (190 mm)
Stroke	4.75 in (121 mm)
Air Inlet	1/2 in NPT
Fluid Outlet	1 in NPT
Maximum 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



Drum Mount



Side Pocket Mount



Horizontal Mount



Top Mount

Ordering Information

GT 750 36:1 Grease Pumps

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

Accessories

Cam Lock Adapters

	Part Number	Description
	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 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 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



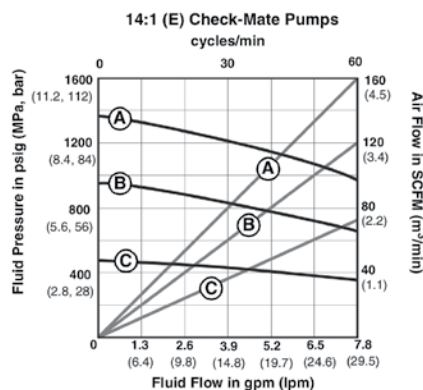
Pump Performance

Inlet Pressures:

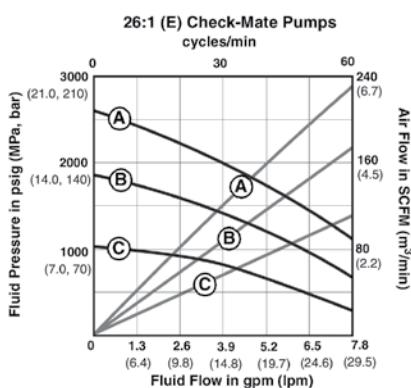
A = 100 psi (6.9 bar) air pressure **B** = 70 psi (4.8 bar) air pressure **C** = 40 psi (2.8 bar) air pressure

TEST FLUID: No. 10 Weight Oil

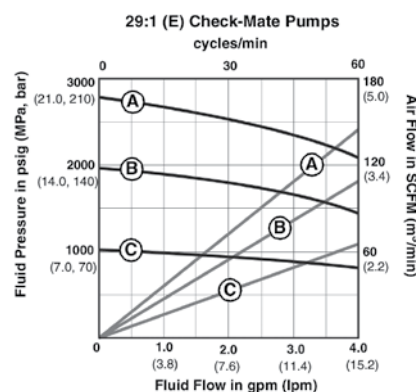
NXT 14:1 Check-Mate Pumps



NXT 26:1 Check-Mate Pumps



NXT 29:1 Check-Mate Pumps



Technical Specifications

	NXT Check-Mate 14:1	NXT Check-Mate 26:1	NXT Check-Mate 29:1
Fluid Pressure Ratio	14:1	26:1	29:1
Air Motor	NXT 3400	NXT 6500	NXT 3400
Air Motor Effective Diameter	7.5 in (191 mm)	10.4 in (264 mm)	7.5 in (191 mm)
Pump Lower	L500CS	L500CS	L250CS
Maximum Fluid Working Pressure	1,400 psi (97 bar / 9.7 MPa)	2,600 psi (179 bar / 17.9 MPa)	2,900 psi (200 bar / 20 MPa)
Output per Cycle	15.4 oz (435 g)	15.4 oz (435 g)	7.7 oz (218 g)
Air Inlet	3/4 in NPT(F)	3/4 in NPT(F)	3/4 in NPT(F)
Fluid Outlet	1-1/2 in NPT(M)	1-1/2 in NPT(M)	1 in NPT(F)
Air Operation Range	0 psi to 100 psi (0 bar to 7 bar)	0 psi to 100 psi (0 bar to 7 bar)	0 psi to 100 psi (0 bar to 7 bar)
Max Recommended Pump Speed	20 cpm	20 cpm	20 cpm
Cycles per Pound	1.0 cpp	1.0 cpp	2.1 cpp
Cycles per Kg	2 cpk	2 cpk	5 cpk
Wetted Parts	303, 304, 316 and 17-4PH grades of stainless steel; ductile iron and carbon steel, electroless nickel plated; carbon steel, zinc and electroless nickel plated; E52100 and ETD 150 alloy steel; PTFE; UHMWPE; carbon-filled PTFE; acetal	303, 304, 316 and 17-4PH grades of stainless steel; ductile iron and carbon steel, electroless nickel plated; carbon steel, zinc and electroless nickel plated; E52100 and ETD 150 alloy steel; PTFE; UHMWPE; carbon-filled PTFE; acetal	ETD 150, 41L40, and 4140 alloy steel; 304, 316, 17-4PH and 440C grades of stainless steel; acetal; carbon-filled PTFE; carbon 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

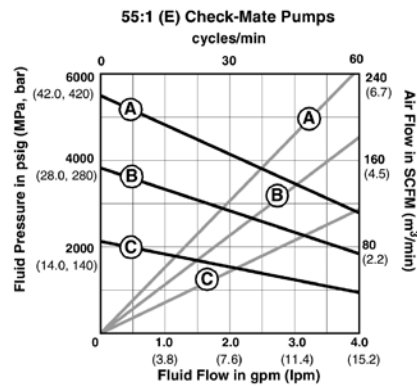
Pump Performance

Inlet Pressures:

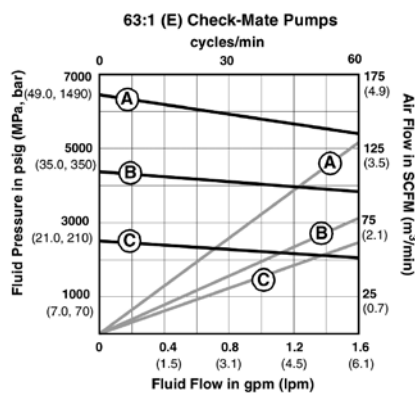
A = 100 psi (6.9 bar) air pressure **B** = 70 psi (4.8 bar) air pressure **C** = 40 psi (2.8 bar) air pressure

TEST FLUID: No. 10 Weight Oil

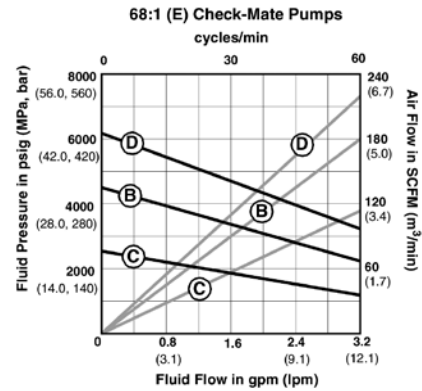
NXT 55:1 Check-Mate Pumps



NXT 63:1 Check-Mate Pumps



NXT 68:1 Check-Mate Pumps



Technical 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 cpp
Cycles per Kg	5 cpk	11 cpk	6 cpk
Wetted Parts	ETD 150, 41L40 and 4140 alloy steel; 304 and 17-4PH grades of stainless steel; acetal; carbon-filled PTFE; CS; ductile iron; eNi, Zn and chrome plating; UHMWPE	ETD 150, 41L40 and 4140 alloy steel; 304 and 17-4PH grades of stainless steel; acetal; carbon-filled PTFE; CS; ductile iron; eNi, Zn and chrome plating; UHMWPE	ETD 150, 41L40 and 4140 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



Ordering Information

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	Floor Standing	Floor Standing	Floor Standing	Floor Standing	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	Floor Standing	Floor Standing	Floor Standing	Floor Standing	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



Ordering Information

RAM Pump Packages with DataTrak

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

RAM Pump Packages without DataTrak

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



Accessory Ordering Information

Drum Covers

	Part Number	Description
	200326	Cover for open-head 400 lb (180 kg) drums
	204574	SD Cover for open-head 70 lb (32 kg) or 120 lb (55 kg)
	24R350	LD Cover for open-head 35 lb (16 kg), 70 lb (32 kg) or 120 lb (55 kg) drums



Field-Proven, Energy-Efficient

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

Built-In Reliability

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

Quiet Hydraulic Motor

No need for add-on mufflers.

High-Efficiency Motor

Uses less hydraulic oil.

Typical Applications

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

Typical Fluids Handled

- Grease up to NLGI #2

Technical Specifications

Fluid Pressure Ratio	5:1	10:1
Pump Number	224912 – 35 lb (16 kg) 224751 – 120 lb (55 kg) 224752 – 400 lb (180 kg)	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

Ordering Information

Dyna-Star Hydraulic Pumps

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

Accessories

Drum Covers

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

Follower Plates

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

Hydraulic Fluid Controls

Required for each pump

	Part Number	Description
	236864	Dyna-Star Fluid Controls [1,500 psi (102 bar); 3 gpm (11.4 lpm)]. Includes manifold with pressure-reducing valve, flow control valve, pressure gauge, shut-off ball valves, and 3 ft (0.9 m) supply and return hoses. Instruction manual 308395.

Tie-Down Covers

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

*Use with hold-down kit 222061. **Use with hold-down kit 207361.



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

Technical 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



Ordering Information

Viscount II Pumps

Part Number	Description
222902	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); 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.

Ordering Information

Manual Dispense from Bulk Containers



Package Number	225914*	225844*	112197**	112198**
Fluids Handled	Grease	Grease	Grease	Grease
Container Size	35 lb (16 kg)	35 lb (16 kg)	35 lb (16 kg)	120 lb (55 kg)
Pump Part Number	203702	203702	—	—
Dispense Kit	203703	203703	Filler Adapter***	Filler Adapter***
Booster Gun	203697	—	—	—
Cover and Follower Plate	203701	203701	—	—
Instruction Manual	306436	306436	306436	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).

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	153
Pro Shot™ 	Grease up to NLGI #2	Non-Metered	8,000 psi (552 bar)	2 lb/min 1 kg/min	Indoor/ Outdoor	1 year	154
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	155

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	156
Pneumatic 	Grease up to NLGI #2	Pistol	6,000 psi (414 bar)	Bulk fill/ loader fill	Indoor/ Outdoor	1 year	156
Booster 	Grease up to NLGI #2	Pistol	10,000 psi (690 bar)	Loader fill	Indoor/ Outdoor	1 year	156



**1 Year
Warranty**

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.



Easy-to-Read LCD

Easily reset electronic display.

Accurate Grease Metering

± 3% accuracy with ± 1% repeatability.

Battery Powered

Utilizes two standard AA alkaline batteries.

Handles Pressure Up to 5,000 psi (345 bar)

Flow up to 36 oz/min (1 kg/min).

Typical Applications

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

Typical Fluids Handled

- Grease up to NLGI #2

Technical Specifications

Maximum Working Pressure	5,000 psi (345 bar)
Metering System	Oval gears
Accuracy	± 3% with grease consistency (grade NLGI) 2/3
Repeatability (typical)	± 1% with grease consistency (grade NLGI) 2/3
Storage Temperature Range	-4°F to 158°F (-20°C to 170°C)
Operating Temperature Maximum	95 (%RU)
Battery	Standard alkaline batteries 2 x 1.5 Volt Size AA
Battery Life	18 to 24 months (depends on usage)
Dimensions (without extension)	8.8 in L x 1.8 in W x 4.4 H (22.4 cm L x 4.6 cm W x 11.2 cm H)
Weight	2.2 lb (1.0 kg)
Warranty	One year
Instruction Manual	309454

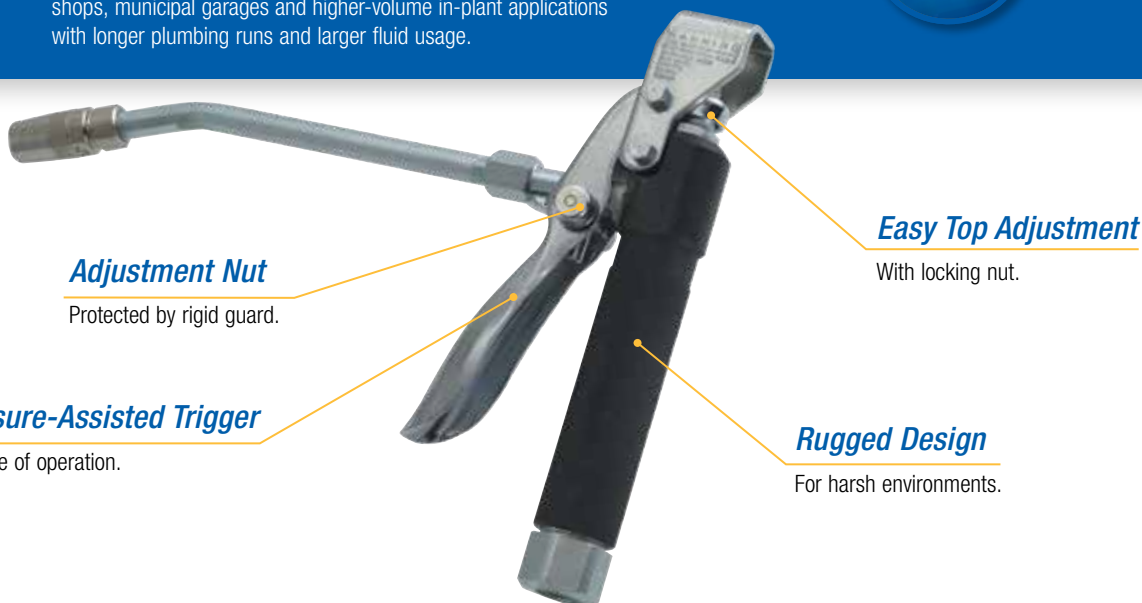
Ordering Information

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	

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.

**1 Year
Warranty**



Typical Applications

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

Typical Fluids Handled

- Grease up to NLGI #2

Technical Specifications

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

Ordering Information

	Description	NPT	
		1/4 in	3/8 in
	Non-metered grease valve with standard nozzle extension (200389)	242056	242058
	Bare non-metered grease valve only	242055	242057
	Non-metered grease valve package. Includes Grease Valve (242056), Z-Swivel (202577) and Whip Hose (109148).	224872	—
	Non-metered grease valve package. Includes Grease Valve (242055), coupler (200325) and Whip Hose (109145).	26C184	—

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.

**1 Year
Warranty**



Typical Applications

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

Typical Fluids Handled

- Grease up to NLGI #2

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)

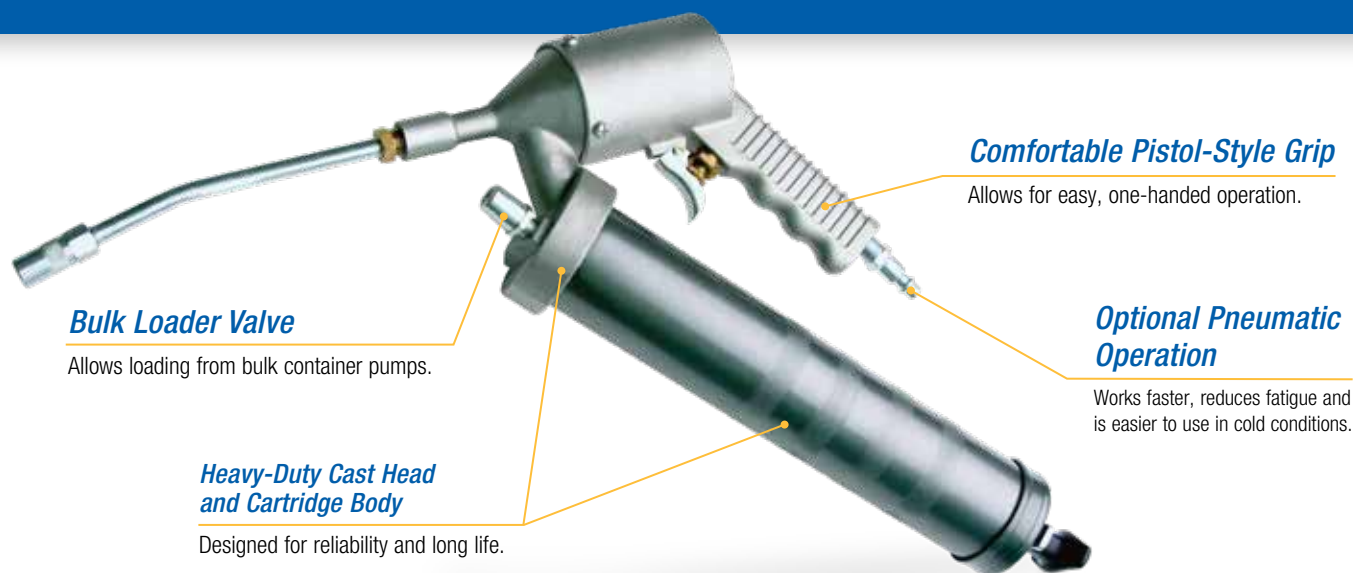
Accessories

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

**1 Year
Warranty**

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	Manual	Lever	6,000 (414)	Cartridge/bulk fill	Rigid extension and hydraulic coupler
	110216			10,000 (690)	Cartridge/ bulk fill/ loader fill	Rigid extension, hydraulic coupler and air bleeder valve
	110203		Pistol			Rigid extension, hydraulic coupler and air bleeder valve
	110202					12 in (30.4 cm) flexible extension, hydraulic coupler and air bleeder valve
	110201			Suction	—	Suction

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

Ordering Information

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 Pressure psi (bar)	NPT		Part Number
		Inlet	Outlet	
	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° Swivels

	Part Number	Includes	
		Fitting	Coupler
	203597	203198	200325
	203198	203198	—

Nozzles

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 rigid nozzle with tapered-nose coupler 200325.



Ordering Information

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.



200325

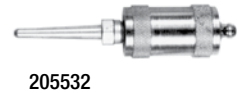


200020

Adapters

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

Part Number	Description
201881	Hydraulic-to-push adapter. Used for U-joints and low-pressure service.
205532	Hydraulic-to-steel needle adapter. Used for flush fittings. 250 psi (17 bar) max. Not for air grease applications or guns.
205582	Hydraulic-to-nylon needle adapter. Used for removable plugs. 250 psi (17 bar) max. Not for air grease applications or guns.
223187	90° hydraulic-to-push adapter (K-car). Refer to instruction manual 306708.
203497	Lock-sleeve connector. 1/8 NPT(F) outlet. Allows for quick connection to tapered-nose coupler. Inlet is standard grease fitting with sleeve to lock connector in place.
236171	Easy-fill valve. For faster loading of Graco hand grease guns with gun loaders. Replaces hydraulic fittings on all grease guns with 1/8 NPT(F).
204929	Grease loader valve. For use with lever-operated, high-volume grease pumps. Permits quick bulk filling of hand-operated grease lever guns equipped with easy-fill valve 236171.
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).



205532



205582



203497



205592

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



100054



100970



100834



100833



100848

Ordering Information

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



101287

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



101297

Giant Button-Head Grease Fitting (steel)

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



110712

Easy-Outs

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



101604

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
202654	30	100054	9/32	1/8 NPT straight
	10	100970	9/32	1/8 NPT 30° angle
	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



202654

Notes

DIESEL EXHAUST FLUID (DEF) SYSTEMS

	Page
How to Choose Your Graco DEF Solution	162
LD Blue Electric Pumps and Packages.	163-165
SD Blue AODD Pumps and Packages.	166-168
LD Blue Manual Pumps	169
DEF Meters	170-171
DEF Dispense Nozzles	172-173
DEF Hose Reels	174
DEF System Accessories	175-179

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.

Tote Mount



Drum Mount



Wall Mount



How to Choose Your Graco DEF Solution:

A

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.



B

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



C

Choose your accessories

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



A Reliable Industrial Pump with Self-Priming Capabilities

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

**2 Year
Warranty!**

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.



Reduced Maintenance

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

Typical Applications

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

Typical Fluids Handled

- Diesel exhaust fluid

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	Approved to US and Canadian Standards	CE

Ordering Information

Pump Only

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

LD Blue Electric Pump Packages



Ordering Information

LD Blue Electric Pump Packages



Package Number	26C172	26C175	26C173	26C174
Mount Type	Tote	Tote	Tote	Tote
Voltage	12 VDC	120 VAC	12 VDC	120 VAC
Type of Nozzle	Automatic	Automatic	Automatic	Automatic
Nozzle	127655	127655	127655	127655
Pump	127643	127642	127643	127642
Bracket	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Meter	127873	127873	–	–
1 in Elbow Fitting	127656	127656	–	–
Dispense Hose	127680	127680	127680	127680
Dispense Hose Length	20 ft	20 ft	20 ft	20 ft
Suction Hose	127679	127679	127679	127679
Suction Hose Length	5 ft	5 ft	5 ft	2 ft
Fittings (2)	SST clamps	SST clamps	SST clamps	SST clamps

Ordering Information

LD Blue Electric Pump Packages



Package Number	24V641	24V644	24V645	24V656	24V646
Mount Type	Tote	Tote	Tote	Drum	Tote
Voltage	120V	120V	120V	120V	12V
Type of Nozzle	Automatic	Manual	Automatic	Automatic	Automatic
Nozzle	127649	125078	127649	127649	127649
Pump	127642	127642	127642	127642	127643
Bracket	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Meter	127663	—	—	—	127663
1 in Elbow Fitting	127656	—	—	—	127656
Dispense Hose	24W161	24W161	24W161	24W161	24W161
Dispense Hose Length	20 ft	20 ft	20 ft	20 ft	20 ft
Suction Hose Length	5 ft	5 ft	5 ft	5 ft	5 ft
Fittings (2)	SST clamps	SST clamps	SST clamps	SST clamps	SST clamps



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



Package 24V656 installed on 55 gallon drum
(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.

**5 Year
Warranty!**

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
- Mining
- 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

Ordering Information

SD Blue Pump Tote Packages

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

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



Ordering Information

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).





**1 Year
Warranty!**

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



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

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
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).



Typical Applications

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

Typical Fluids Handled

- Diesel exhaust fluid

Features and Benefits

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

Technical 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

	Part Number	Description
	127800	Adapter – SD auto nozzle connection to LD meter



**2 Year
Warranty!**

Features and Benefits

- Easy break-away system for low-cost repairs if the spout becomes detached
- Choose with or without built-in meter
- 4 gpm to 12 gpm flow rate
- 50 psi maximum pressure
- 3/4 in BSPP inlet to transform nozzle into 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	1 in BSP
Maximum Totalizer	—	999,999
Maximum Recorded Dispense	—	99,999
Operating Temperature Range	-4°F to 130°F (-20°C to 55°C)	14°F to 122°F (-10°C to 50°C)
Storage Temperature Range	-40°F to 140°F (-40°C to 60°C)	-4°F to 158°F (-20°C to 70°C)
Outdoor Use	Yes	No
Battery	—	2AA alkaline
Wetted Parts	SST, rubber, plastic	SST, rubber, plastic
Meter Pressure Loss	13 psi (0.9 bar) @ 9.3 gpm (35 lpm)	13 psi (0.9 bar) @ 9.3 gpm (35 lpm)
Instruction Manual	333468	333469

Typical Applications

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

Typical Fluids Handled

- Diesel exhaust fluid

Ordering Information

Part Number	Description
127649	LD 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

Ordering Information

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, ceiling, 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	3A0138

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

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

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

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

DrumQuick® 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™) is designed for one-way, single-use applications. Engineered for use when operations require the container package to be used once, emptied 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
	127796	Micro Matic RSV center downtube for 275 gal IBC tote
	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

EPV™ is a trademark of Micro Matic USA, Inc.

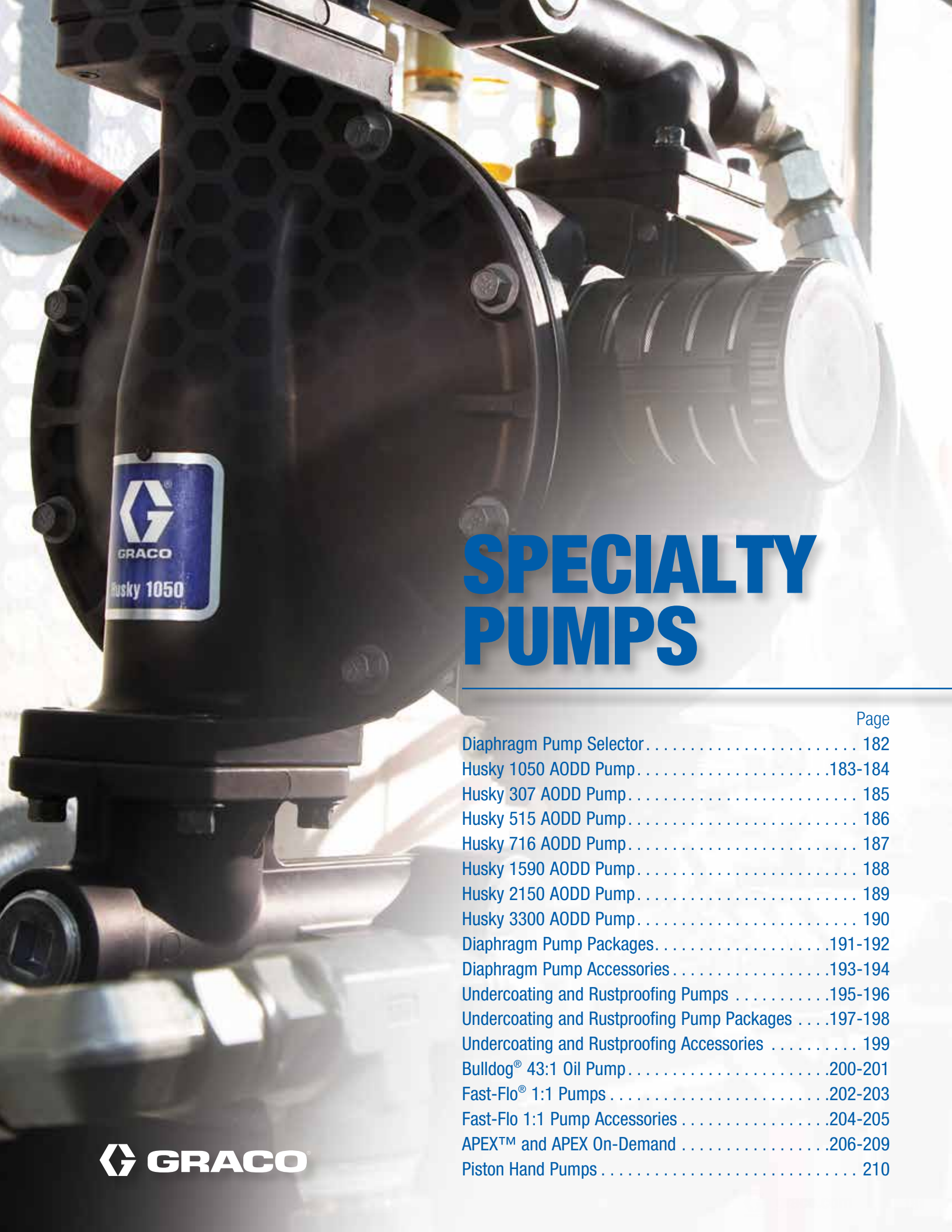
Ordering Information

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)

[illegible]



SPECIALTY PUMPS

	Page
Diaphragm Pump Selector.....	182
Husky 1050 AODD Pump.....	183-184
Husky 307 AODD Pump.....	185
Husky 515 AODD Pump.....	186
Husky 716 AODD Pump.....	187
Husky 1590 AODD Pump.....	188
Husky 2150 AODD Pump.....	189
Husky 3300 AODD Pump.....	190
Diaphragm Pump Packages.....	191-192
Diaphragm Pump Accessories.....	193-194
Undercoating and Rustproofing Pumps.....	195-196
Undercoating and Rustproofing Pump Packages.....	197-198
Undercoating and Rustproofing Accessories.....	199
Bulldog® 43:1 Oil Pump.....	200-201
Fast-Flo® 1:1 Pumps.....	202-203
Fast-Flo 1:1 Pump Accessories.....	204-205
APEX™ and APEX On-Demand.....	206-209
Piston Hand Pumps.....	210

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 - Anti-freeze - Windshield wash fluid	–	100 psi (6.9 bar)	185
Husky 515 	243669	Husky 515 Acetal Split Inlet – 3/4 in Acetal/Buna Dual Inlet	50/50 windshield wash solution - Water - Anti-freeze	–	100 psi (6.9 bar)	186
Husky 716 	241906	Husky 716 Aluminum – 3/4 in Aluminum/Buna-N	- Oil evacuation - Oil transfer - Water - Anti-freeze - Windshield wash fluid	–	100 psi (6.9 bar)	187
Husky 1050 	647016	Husky 1050 Aluminum – 1 in Aluminum/TPE	- Water - Anti-freeze - Fuel transfer - Gasoline (up to 10% ethanol)	UL	100 psi (6.9 bar)	183-184
Husky 1050 	647731	Husky 1050 Aluminum – 1 in Aluminum/Buna-N	- Oil evacuation - Oil transfer	UL	100 psi (6.9 bar)	183-184
Husky 1050 	647648	Husky 1050 Aluminum – 1 in Aluminum/TPE	- Fuel dispense - Gasoline (up to 10% ethanol)	UL	50 psi (3.5 bar)	183-184
Husky 1590 	DB3525	Husky 1590 Aluminum – 1.5 in Aluminum/TPE	- Oil evacuation - Oil transfer - Water - Anti-freeze	–	120 psi (8.3 bar)	188
Husky 2150 	DF3525	Husky 2150 Aluminum – 2 in Aluminum/TPE	- Oil evacuation - Oil transfer - Water - Anti-freeze	–	120 psi (8.3 bar)	189
Husky 3300 	652002	Husky 3300 Aluminum – 3 in Aluminum/TPE	- Oil evacuation - Oil transfer - Water - Anti-freeze	–	125 psi (8.6 bar)	190



Husky 1050 AODD Pump

**UL
Listed!**

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 anti-freeze 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

Specialty Pumps

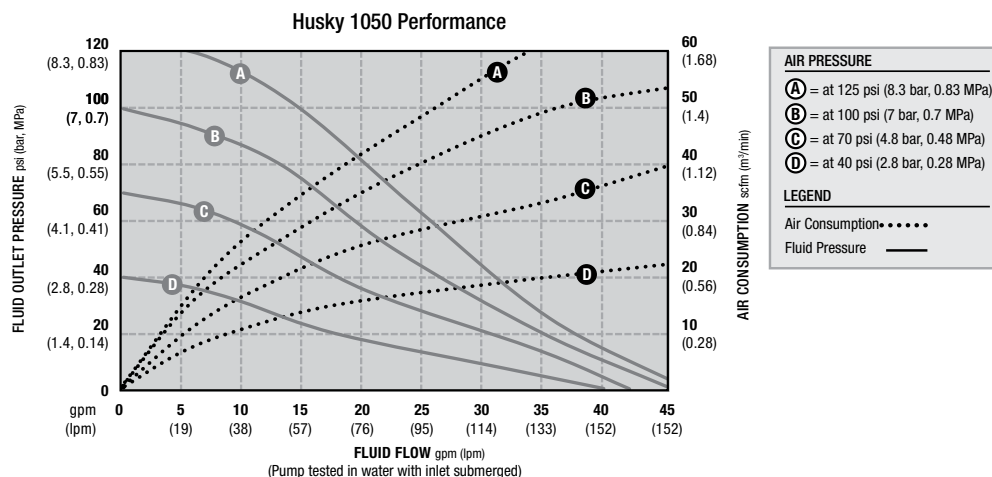
Typical Applications

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

Typical Fluids Handled

- Oil
- Fuel
- Water
- Anti-freeze
- Washer fluid

Pump Performance



Husky 1050 AODD Pump



Technical Specifications

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

*Sound power measured per ISO-9614-2.

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

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 / anti-freeze / 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



Husky 307 AODD Pump



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 m ³ /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

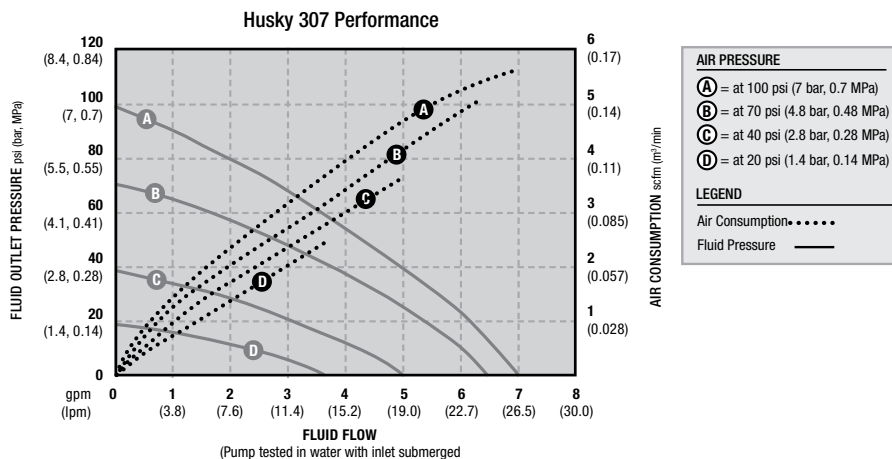
*Flow rates are with muffler and do not vary based on diaphragm material. **Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type. ***Actual pump performance may be affected by prolonged usage at temperature.

Ordering Information

Husky 307 AODD Pump

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

Pump Performance





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

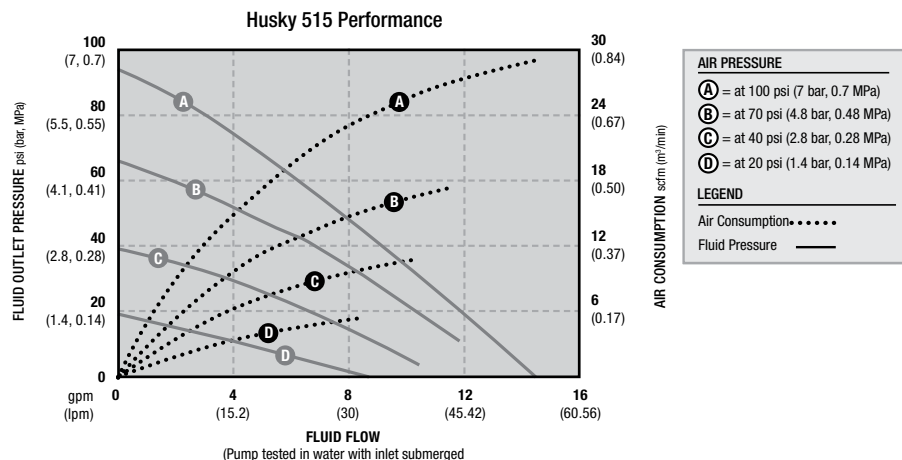
*Flow rates are with muffler and do not vary based on diaphragm material. **Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type. ***Actual pump performance may be affected by prolonged usage at temperature.

Ordering Information

Husky 515 AODD Pump

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

Pump Performance





Husky 716 AODD Pump



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

Technical Specifications

Maximum fluid working pressure	100 psi (6.9 bar, 0.69 MPa)
Maximum free-flow delivery*	16 gpm (61 l/min)
Maximum pump speed	400 cpm
Fluid displacement per cycle**	0.04 gal (0.15 l)
Maximum suction lift	15 ft (4.5 m) dry, 25 ft (7.6 m) wet
Maximum-size pumpable solids	3/32 in (2.5 mm)
Maximum ambient operating temperature***	180°F (82.2°C)
Maximum diaphragm operating temperature***	180°F (82.2°C)
Typical sound level at 70 psi (4.8 bar, 0.48 MPa) air @ 50 cpm	77 dB(A)
Maximum air consumption	28 scfm (0.672 m³/min)
Air pressure operating range	25 psi to 100 psi (1.8 bar to 6.9 bar, 0.18 MPa to 0.69 MPa)
Air inlet size	1/4 NPT(F)
Fluid inlet size	3/4 in NPT(F)
Fluid outlet size	3/4 in NPT(F)
Weight	8.5 lb (3.9 kg)
Wetted parts	Buna-N, acetal, aluminum, stainless steel, PTFE, zinc-plated steel
Instruction manual	308573

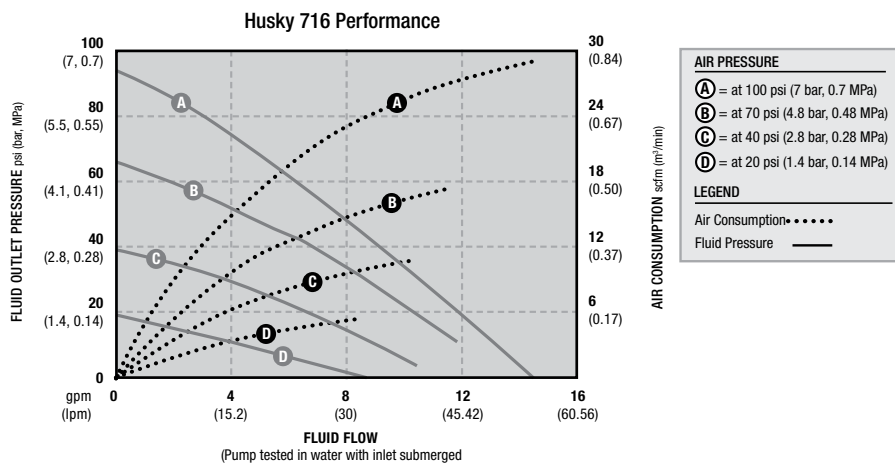
*Flow rates are with muffler and do not vary based on diaphragm material. **Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type. ***Actual pump performance may be affected by prolonged usage at temperature.

Ordering Information

Husky 716 AODD Pump

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

Pump Performance





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

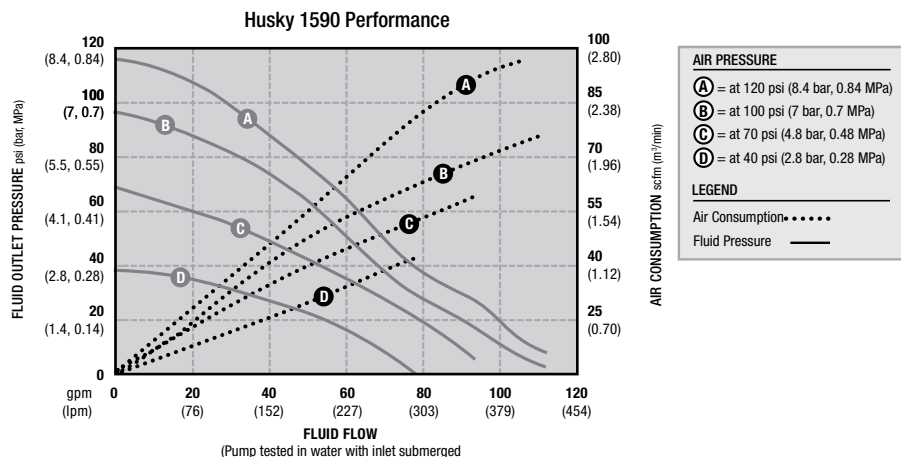
*Flow rates are with muffler and do not vary based on diaphragm material. **Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type. ***Actual pump performance may be affected by prolonged usage at temperature.

Ordering Information

Husky 1590 AODD Pump

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

Pump Performance





Husky 2150 AODD Pump



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

Technical 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

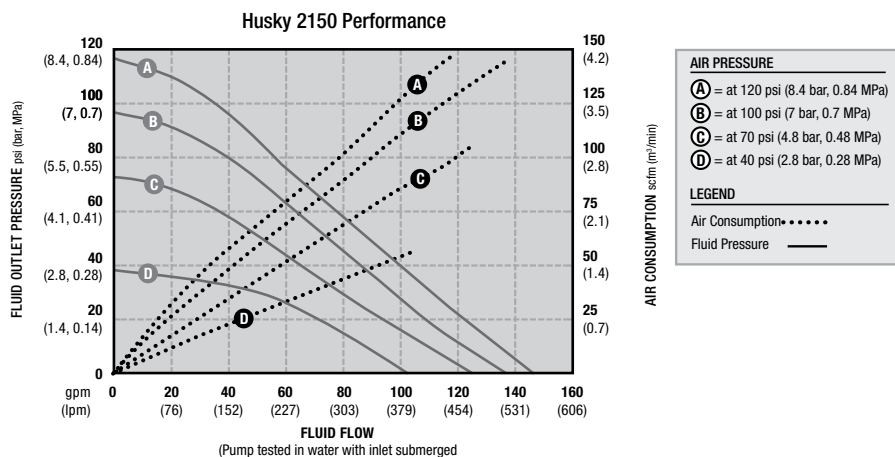
*Flow rates are with muffler and do not vary based on diaphragm material. **Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type. ***Actual pump performance may be affected by prolonged usage at temperature.

Ordering Information

Husky 2150 AODD Pump

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

Pump Performance





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.

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

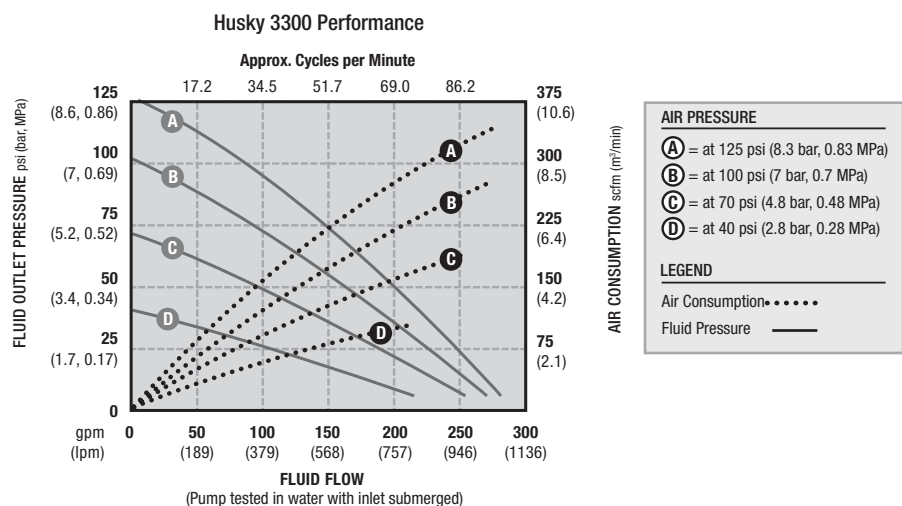
***Sound power measured per ISO-9614-2. Sound pressure was tested 3.28 ft (1 m) from equipment.

Ordering Information

Husky 3300 AODD Pump

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

Pump Performance





Ordering Information

Pre-Mixed Windshield Wash Solvent and Coolant Dispense



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

Ordering Information

Bulk Anti-Freeze and Windshield Solvent Transfer Packages



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

Air Line Filters

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

Air Regulator and Gauge

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

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

Bleed-Type Air Valve

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

Dual-Inlet Manifold

	Husky Pump	307	515	1050	1590	2150	3300
	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

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

Diaphragm Pump Accessories

Thermal Relief Kit

	Husky Pump	307	515/716	1050	1590	2150	3300
	Part Number	238899	238428	238428	—	—	—

Thermal Relief Valves – 150 psi (10.3 bar)

	Husky Pump	307	515/716	1050	1590	2150	3300
	Part Number	113497 al/bn, 112119 ss/tf					

Wall Bracket

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

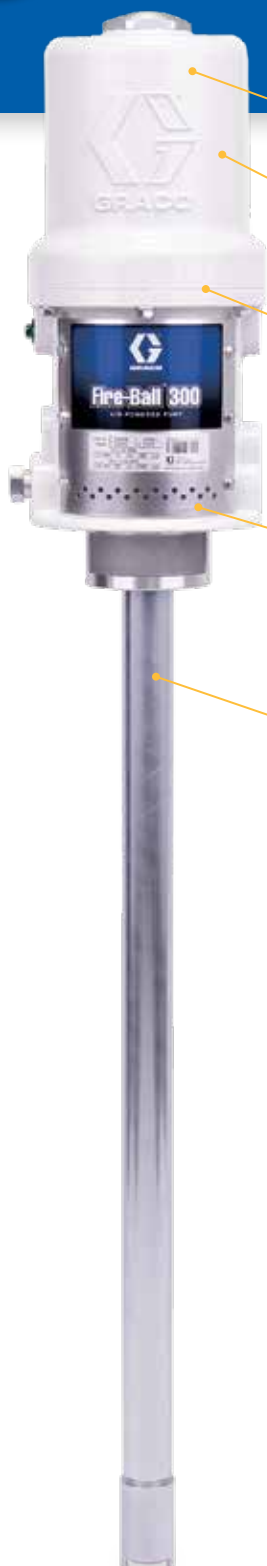
Air-Operated Double-Diaphragm Transfer Pumps Replacement Parts

									
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

7 Year
Warranty!

Ideal for Undercoating and Rustproofing Application in Medium-Sized Shops

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



Durable

Thick cast aluminum air motor housing offers unmatched durability.

Superior Material Handling

Double-acting pump ensures smooth fluid flow.

Extended Seal Life

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

Wetted-Parts Options

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

Corrosion-Resistant

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

Typical Applications

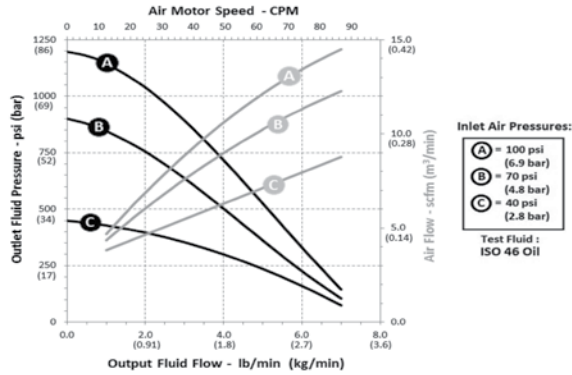
- Undercoating, rustproofing and sound-deadening materials
- Automotive and heavy-duty vehicle dealerships
- Fast lube centers and service shops
- Fleet service facilities

Typical Fluids Handled

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

Pump Performance

Fire-Ball 300 15:1 Pumps



Technical Specifications

Fluid Pressure Ratio	15:1
Air Motor Effective Diameter	3 in (76.2 mm)
Annual Usage	Up to 10,000 lb (4,535 kg)
Maximum Fluid Working Pressure	2,700 psi (186 bar / 18.6 MPa)
Approximate Free-Flow Rate @ 100 psi	7.5 lb/min (3.4 kg/min)
Output per Cycle	1.29 oz (36.6 g)
Continuous-Duty Flow Rate	0.7 lb/min (0.32 kg/min)
Approximate Air Use and Flow @ 100 psi (80 cpm)	14 @ 6.5 lb/min (0.40 @ 2.9 kg/min)
Air Inlet	3/8 in NPT(F)
Fluid Outlet	1/4 in NPT(F)
Air Operation Range	40 psi to 180 psi (2.8 bar to 12.5 bar)
Max Recommended Pump Speed	66 cpm
Cycles per Pound	12.4 cpp
Cycles per Kg	27 cpk
Wetted Parts	CS, AL, leather, PTFE, rubber
Sound Pressure Level	77.8 dB(A)
Sound Power Level	85.6 dB(A)
Approximate Weight	22 lb (10 kg)
Instruction Manual	306531

Ordering Information

Undercoating Packages



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)



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	28621 1/286621
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

	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.

Bulldog® 43:1 Oil Pump



1 Year
Warranty

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.



Added Safety

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

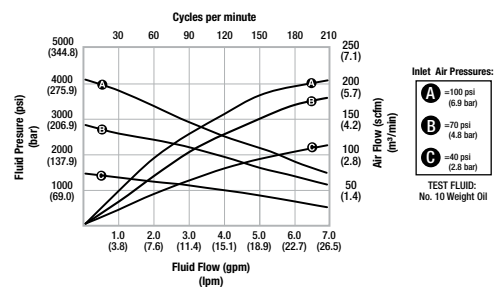
- Supplies hydraulic oil to accumulators in oil rig blow-out prevention systems.

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

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

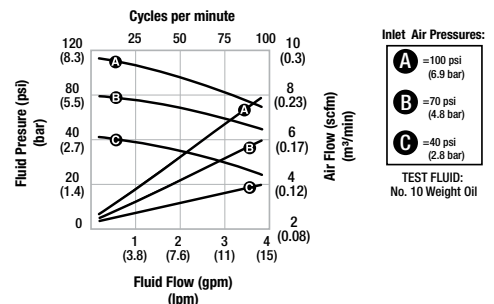
Typical Fluids Handled

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

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

Pump Performance

Fast-Flo 1:1 Pumps





Fast-Flo 1:1 Pumps

Technical Specifications

Fluid Pressure Ratio	1:1
Air Motor Effective Diameter	1.4 in (35.6 mm)
Maximum Fluid Working Pressure	180 psi (12 bar/1.2 Mpa)
Approximate Free-Flow Rate @ 100 psi (80 cpm)	5 gal/min (19 liters/min)
Output per Cycle	151 cc
Approximate Air Use and Flow @ 100 psi (80 cpm)	7 csfm @ 3.1 gpm (0.2 m³/min @ 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
Anti-Freeze, Windshield Washer Solvent, ATF, Oil	Drum	Stainless Steel	Polyethylene	ETL, CE, EX	226942
	Universal	Stainless Steel	Polyethylene	ETL, CE, EX	226945
Oil	Drum	Carbon Steel	Buna-N	CE	226947
			Buna-N	CE	226951*
			Leather	CE, EX	237133
			PTFE	CE, EX	237134
			Leather	ETL, CE, EX	226940
			Polyethylene	ETL, CE, EX	226941
		Stainless Steel	Buna-N	CE	226953
			PTFE	CE, EX	237129
	Universal	Carbon Steel	Buna-N	CE	226948
			Leather	CE, EX	237130
			PTFE	CE, EX	237131
			Leather	ETL, CE, EX	226943
		Stainless Steel	Polyethylene	ETL, CE, EX	226944
			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	
			Air Hose / Swivel Elbow	Fluid Hose / Swivel Elbow
	222118	18 in (0.5 m) for connecting wall-mounted Fast-Flo 1:1 pumps to piping	109123 / 155541	109108 / 160327
	222119	6 ft (1.8 m) for use with drum-mounted Fast-Flo 1:1 pumps	109125 / 155541	109105 / 160327

Bung Adapters

	Part Number	Description
	214583	Allows direct mounting of full-length Fast-Flo 1:1 pumps into standard 2 in NPT drum bung (included).
	217359	Sealed bung adapter for Fast-Flo pumps; can be used with suction kit 236054.

Installation Kits

	Part Number	Description
	218316	Includes regulator (104815), gauge (104655) and fittings (169969/114558) as necessary for normal installation.
	210881	Wall mounting bracket for Fast-Flow 1:1 Pumps

Suction Kit

	Part Number	Description	Includes		
			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.
	Part Number	Description
	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

	Part Number	Description
	106149	1/2 in NPT inlet and outlet

Air Line Lubricator

	Part Number	Description
	214848	1/2 in NPT inlet and outlet

1 Year
Warranty

Electric Gear Pumps for High-Volume Transfer

At Graco, we provide durable pumping solutions for all your oil and fluid transfer applications. Our line of APEX pumps is available in AC and DC configurations to meet your fluid transfer needs.



APEX Transfer Pumps

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



APEX On-Demand Pumps

- Available in 12 VDC and 115 VAC
- On-demand pressure-sensing system starts and stops the pump
- TENV electric motor to handle the dirtiest environments
- Extremely quiet pump operation
- Output flow is continuous and non-pulsating
- Low operating and installation costs
- Inlet and outlet check valves with thermal relief valves included
- All units include bung adapter

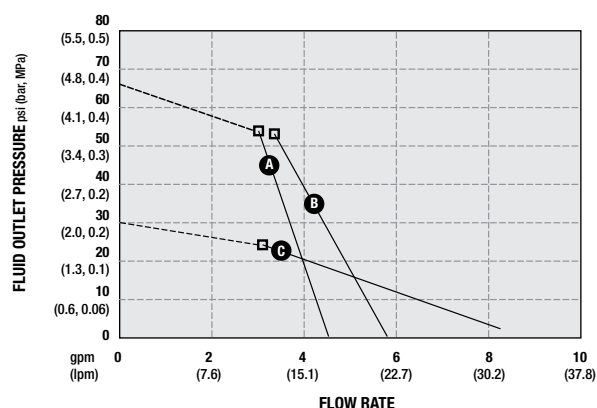
Typical Applications

- 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

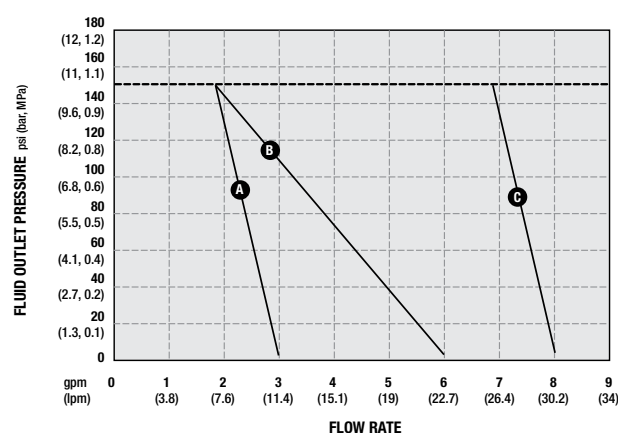
Typical Fluids Handled

- Synthetic oil
- Petroleum oil*
- Used oil*
- Anti-freeze
- Hydraulic fluids
- Cutting oils
- Liquid soap
- Non-flammable oil-based solvents
- Oil-based herbicide carriers

**Not for food grade use.*



PART NUMBERS	LEGEND
(A) = 260101, 260104	Relief valve opens
(B) = 260100	
(C) = 260102	

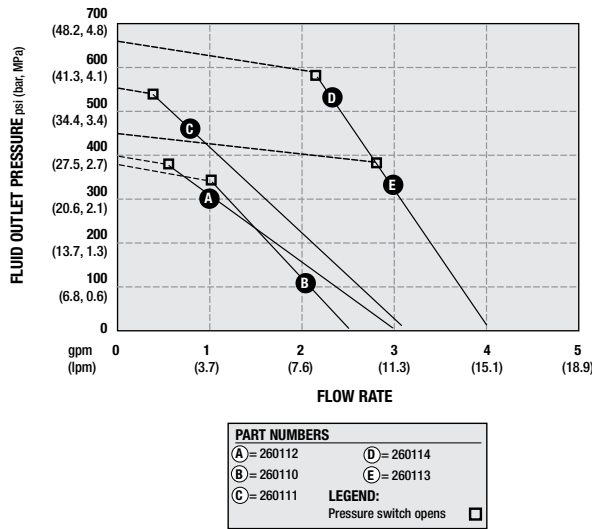


PART NUMBERS	LEGEND
(A) = 260105, 260106	Relief valve setting at 150 psi (10.3 bar, 1.0 MPa)
(B) = 260108	
(C) = 260109	

Ordering Information

APEX Pumps

Part Number	260100	260101	260102	260104	260105	260106	260108	260109
Motor	12 VDC	115 VAC	115 VAC	230 VAC	115 VAC	115 VAC	115 VAC	115 VAC
Hertz	—	60 Hz	60 Hz	50/60 Hz	60 Hz	60 Hz	60 Hz	60 Hz
Horsepower	3/4	1	3/4	1/2	3/4	3/4	3/4	1
Maximum Current (Amps)	35	9.2	9.2	4	7.5	7.5	9	11
Maximum Flow Rate gpm (lpm)	5.8 (22)	4.25 (16)	8.0 (30)	4.25 (16)	3.0 (11)	3.0 (11)	4.2 (16)	7.9 (30)
Maximum Pressure psi (bar)	65 (4.5)	65 (4.5)	65 (4.5)	65 (4.5)	150 (10)			
Automatic Relief Setting psi (bar)	65 (4.5)	65 (4.5)	30 (2.1)	65 (4.5)	—			
Inlet	1 in NPT							
Outlet	3/4 in NPT							
Wetted Parts	Carbon steel with zinc plating, stainless steel, galvanized steel, aluminum, nitrile, rubber, PVC, PVC cement				Carbon steel with zinc plating, stainless steel, galvanized steel, aluminum, nitrile, rubber			
Weight lb (kg)	34 (15)	25 (11)	25 (11)	25 (11)	25 (11)	25 (11)	25 (11)	30 (14)
Manual	311305				311306			



Ordering Information

APEX On-Demand Pumps

Part Number	260110	260111	260113	260114	260112
Voltage	115 VAC	115 VAC	115 VAC	115 VAC	12 VDC
Hertz	60 Hz	60 Hz	60 Hz	60 Hz	—
Horsepower	3/4	1	1-1/2	2	3/4
Bung Adapter	260061	260061	260061	260061	260061
Maximum Current (Amps)	10.6	13.6	18.0	21.0	62.0
Maximum Flow Rate gpm (lpm)	2.3 (9)	3 (11)	4 (15)	4 (15)	3 (11)
Maximum Pressure psi (bar)	370 (25)	550 (38)	470 (32)	650 (45)	400 (28)
Inlet	3/4 in NPT	3/4 in NPT	3/4 in NPT	3/4 in NPT	3/4 in NPT
Outlet	1/2 in NPT	1/2 in NPT	1/2 in NPT	1/2 in NPT	1/2 in NPT
Wetted Parts	Carbon steel with zinc plating, stainless steel, galvanized steel, aluminum, nitrile, rubber, PVC, PVC cement				
Weight lb (kg)	27 (12)	32 (15)	41 (19)	52 (24)	27 (12)
Manual	311307				

Ordering Information

Accessories

	Part Number	Description
	260145	Wall mounting bracket, fits all models
	260238	"Y" strainer with 3/4 in NPT female in-line strainer for used oil transfer
	260306	Inlet suction screen assembly, required for used oil applications, 20 mesh screen
	260124	55 in (1.3 m) PVC suction tube with inlet check valve
	260125	Dispense valve kit
	260300	Suction tube kit, 3/4 in PVC

1 Year
Warranty

Graco piston hand pumps are designed for long life and smooth operation



Features and Benefits

- Lightweight die cast aluminum construction
- Corrosion-resistant design
- High-quality piston seals are designed for long life and smooth operation
- Integrated nozzle holster helps prevent fluid contamination
- Adjustable bung adapter allows pump to be rotated
- One quart per stroke gives fast, efficient fluid transfer
- Locking mechanism prevents unauthorized dispensing

Technical Specifications

	260406	260407
Inlet	1 in NPT(F)	1 in NPT(F)
Outlet	3/4 in NPT(F)	3/4 in NPT(F)
Hose	3/4 in x 8 ft, EPDM	3/4 in x 8 ft, petroleum (buna)
Standpipe	34 in / 2 piece	34 in / 2 piece
Shaft and Piston Liner	SST	SST
Seals	Viton	Buna-N
Weight	12 lb (5 kg)	12 lb (5 kg)
Instruction Manual	311308	311308

Typical Applications

- Construction equipment
- Agricultural equipment

Typical Fluids Handled

- Petroleum products and other fluids compatible with aluminum and buna-N seals.
- Herbicides and other chemicals or fluids compatible with fluoroelastomer seals, aluminum, and EPDM.

Ordering Information

Part Number	Description
260406	Chemical Piston Hand Pump
260407	Petroleum Piston Hand Pump



HOSE AND CORD REELS

	Page
Hose Reel Selection Guide.....	212
LD™ Series Enclosed Hose Reels.....	214-216
SD™ Series Hose Reels.....	217-223
SD™ Series Cord and Light Reels.....	224-227
XD™ Series 10/20 Hose Reels.....	228-233
XD™ Series 30 Hose Reels.....	234-238
XD™ Series 40/50 Hose Reels.....	239-244
XD™ Series 60/70/80 Powered Hose Reels.....	246-257

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 • Anti-freeze • Windshield washer fluid	• 35 ft (11 m) • 45 ft (14 m) • 50 ft (15 m)	Yes	214-216
SD™ 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 • Anti-freeze • Windshield washer fluid	• 35 ft (11 m) • 50 ft (15 m) • 65 ft (20 m)	Optional	217-224
SD™ Series Cord Reels 	• Automotive dealerships • Fast lube centers • Service shops • Heavy-duty dealerships • Fleet services facilities • In-plant • Lube trucks • Mining	—	• 35 ft (11 m) • 50 ft (15 m) • 95 ft (29 m)	Optional	224-227
XD™ 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 • Anti-freeze • Windshield washer fluid	• 35 ft (11 m) • 50 ft (15 m) • 65 ft (20 m)	Optional	228-233
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 • Anti-freeze • 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	234-238
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 • Anti-freeze • Waste oil evacuation	• 35 ft (11 m) • 50 ft (15 m) • 75 ft (23 m) • 100 ft (30 m)	No	239-244
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	246-257

LD Series Enclosed Hose Reels



**5 Year
Warranty!**

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, ceiling bench, or tank configurations (wall mount pictured)

Full Enclosure

Tough, dent-proof, corrosion-resistant enclosure

Typical Applications

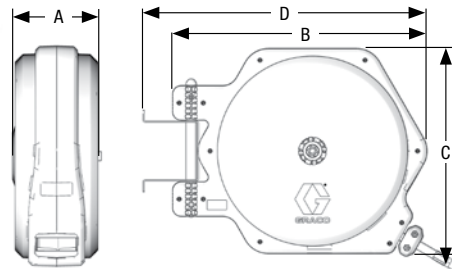
- Small maintenance shops
- Tire maintenance shops
- Small fast lubes
- Independent repair facilities
- Industrial manufacturing facilities

Typical Fluids Handled

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

Dimensions

A	7.1 in (180 mm)
B	23.0 in (585 mm)
C	18.5 in (470 mm)
D	25.6 in (650 mm)



Technical 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/Anti-Freeze/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 Enclosed Hose Reels

Ordering Information

LD Series Reel Packages

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

Type of Mount	Fluid	Hose		Connection Size		Maximum Pressure psi (bar)	Package Part Number	Package Includes		
		ID in (mm)	Length ft (m)	Inlet in (mm)	Outlet in (mm)			Reel Assembly	Mount Kit	Inlet Kit
 Ceiling/Wall Swivel Mount	Air/Water/ Anti-Freeze/ Windshield Washer Fluid	3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	250 (17.2)	24F737	24H657	24G866	24C444
		3/8 (10)	50 (15)	1/2 (13)	3/8 (10)	250 (17.2)	24F738	24H658		
		1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	250 (17.2)	24F739	24H659		
		1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	250 (17.2)	24F740	24H660		
	Oil	3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	1,800 (124)	24F741	24H661	24G866	24C537
		1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	1,800 (124)	24F742	24H662		24C538
	Grease	1/4 (6)	35 (11)	3/8 (10)	1/4 (6)	5,000 (345)	24F743	24H663		24C539
 Ceiling/Wall Stationary Mount	Air/Water/ Anti-Freeze/ Windshield Washer Fluid	3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	250 (17.2)	24F755	24H657	24G865	24C444
		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		
	Oil	3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	1,800 (124)	24F759	24H661	24G865	24C537
		1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	1,800 (124)	24F760	24H662		24C538
	Grease	1/4 (6)	35 (11)	3/8 (10)	1/4 (6)	5,000 (345)	24F761	24H663		24C539
 Bench Swivel Mount	Air/Water/ Anti-Freeze/ Windshield Washer Fluid	3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	250 (17.2)	24F773	24H657	24C772	24C444
		3/8 (10)	50 (15)	1/2 (13)	3/8 (10)	250 (17.2)	24F774	24H658		
		1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	250 (17.2)	24F775	24H659		
		1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	250 (17.2)	24F776	24H660		
	Oil	3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	1,800 (124)	24F777	24H661	24C772	24C537
		1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	1,800 (124)	24F778	24H662		24C538
	Grease	1/4 (6)	35 (11)	3/8 (10)	1/4 (6)	5,000 (345)	24F779	24H663		24C539

Hose and Cord Reels

LD Series Enclosed Hose Reels



Ordering Information

LD Series Reel

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

	Fluid	Hose		Connection Size		Maximum Pressure psi (bar)	Part Number	Hose Inlet Kit (order separately)
		ID in (mm)	Length ft (m)	Inlet in (mm)	Outlet in (mm)			
	Air/Water/ Anti-Freeze/ Windshield Washer Fluid	3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	250 (17.2)	24H657	24C444
		3/8 (10)	50 (15)	1/2 (13)	3/8 (10)	250 (17.2)	24H658	24C444
		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
		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	250 (17.2)	1/4 (6)	1/4 NPT(M)	1/4 NPT(M)	24C443	24H655 / 24H656
	Air/Water		3/8 (10)	1/2 NPT(M)	3/8 NPT(M)	24C444	24H657 / 24H658
			1/2 (13)	1/2 NPT(M)	1/2 NPT(M)		24H659 / 24H660
	Oil	1,800 (124)	3/8 (10)	1/2 NPT(M)	1/2 NPT(M)	24C537	24H661
			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



SD Series Hose Reels

**7 Year
Warranty!**

Engineered for Everyday Use

The SD line of hose reels feature Graco durability, performance and value built into every reel. With its durable metal spool and rigid pedestal frame, the compact SD Series is ideal for indoor and moderate outdoor exposure.



Full-Flow Swivel

Maximize material flow with minimal pressure drop for faster fills to get more vehicles through your shop.

Adjustable Arm

Easily change to one of six arm positions to fit your application.

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.

Durable Finish

Baked-on enamel finish (five colors available) protects reel from corrosion.

Reel arm shown in tank/bench mount position.

Typical Applications

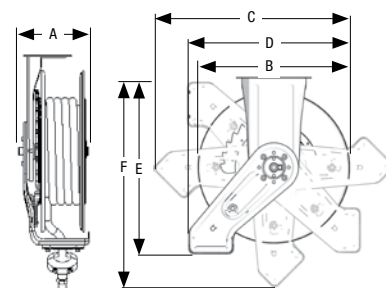
- Car dealerships
- Light-/medium-duty truck dealers
- Fleet maintenance
- Public works garages
- Construction vehicle maintenance
- Light-utility service trucks

Typical Fluids Handled

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

Dimensions

	SD 10	SD 20
A	7.0 in (177 mm)	7.0 in (177 mm)
B	16.2 in (412 mm)	18.1 in (460 mm)
C	21.0 in (533 mm)	23.4 in (594 mm)
D	17.1 in (435 mm)	19.2 in (488 mm)
E	19.5 in (495 mm)	21.8 in (554 mm)
F	22.5 in (571 mm)	25.2 in (640 mm)



Technical Specifications

Operating Temperature Range

Air/Water/Anti-Freeze/Windshield Washer Fluid Reels	-20°F to 190°F (-28°C to 87°C)
Oil Reels	-20°F to 190°F (-28°C to 87°C)
Grease Reels	-40°F to 200°F (-40°C to 93°C)

Wetted Parts

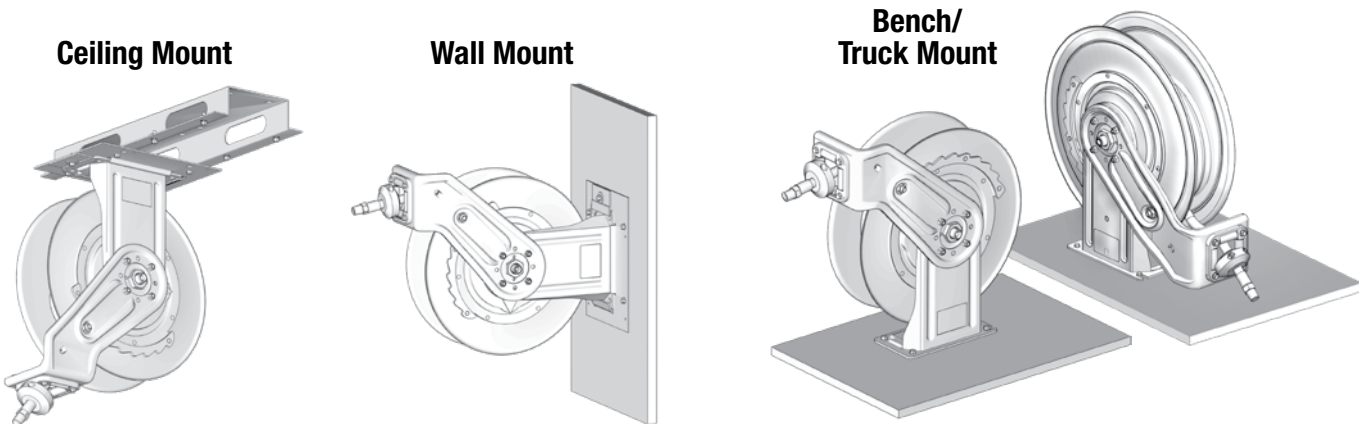
Grease Reels	Zinc plated steel, polyurethane, steel
All Other Reels	Zinc plated steel, anodized aluminum, nitrile rubber

Weight	52 lb (23.5 kg)
Sound Pressure Level	80 dB(A)
Sound Power Level	88 dB(A)
Instruction Manual	313431

SD Series Hose Reels



Typical Mounting Configurations



Available in
5 Colors
Consult factory for
lead times.



Hose and Cord Reels



SD Series Hose Reels

Ordering Information

SD 10/20 Reel Assembly Ordering Guide

SD 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	A
Metallic Blue	B
Red	C
Black	D
Yellow	F

Order Example:

Arm in overhead mount position, SD 20, oil, 1/2 in ID hose, 50 ft hose length

1

Select your reel position:

HPM65#

2

Select your reel color:

(from Reel Assembly Ordering Guide – opposite)

Metallic Blue = “B”

Order Part Number:

HPM65B



Arm in Overhead Mount Position

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

	Reel Size	Fluid	Hose		Connection Size		Maximum Pressure psi (bar)	Assembly Part Number	Recommended Hose Inlet Kit
			ID in (mm)	Length ft (m)	Inlet in (mm)	Outlet in (mm)			
	SD 10	Air/Water/ Anti-Freeze/ Windshield Washer Fluid	3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	300 (20.7)	HPL23#	218549
			3/8 (10)	50 (15)	1/2 (13)	3/8 (10)	300 (20.7)	HPL25#	
			1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	300 (20.7)	HPL33#	
	SD 20		3/8 (10)	65 (20)	1/2 (13)	3/8 (10)	300 (20.7)	HPL56#	
			1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	300 (20.7)	HPL65#	
			SD 10	Oil	1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	
	SD 20	1/2 (13)			50 (15)	1/2 (13)	1/2 (13)	2,000 (138)	HPM65#
	SD 10	Grease	1/4 (6)	50 (15)	3/8 (10)	1/4 (6)	5,000 (345)	HPH15#	218550
			3/8 (10)	35 (11)	3/8 (10)	1/4 (6)	4,800 (331)	HPH23#	
SD 20	3/8 (10)		50 (15)	3/8 (10)	1/4 (6)	4,800 (331)	HPH55#		

Arm in Tank/Bench Mount Position

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

	Reel Size	Fluid	Hose		Connection Size		Maximum Pressure psi (bar)	Assembly Part Number	Recommended Hose Inlet Kit
			ID in (mm)	Length ft (m)	Inlet in (mm)	Outlet in (mm)			
	SD 20	Air/Water/ Anti-Freeze/ Windshield Washer Fluid	3/8 (10)	65 (20)	1/2 (13)	3/8 (10)	300 (20.7)	HPL5J#	218549
			1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	300 (20.7)	HPL6H#	
		Oil	1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	2,000 (138)	HPM6H#	218550
		Grease	3/8 (10)	50 (15)	3/8 (10)	1/4 (6)	4,800 (331)	HPH5H#	

SD Series Hose Reels



Ordering Information

Bare Reels

Arm in Overhead Mount Position

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

	Reel Size	Fluid	Hose (Not Included)		Connection Size		Maximum Pressure psi (bar)	Assembly Part Number	Recommended Hose Inlet Kit
			ID in (mm)	Length ft (m)	Inlet in (mm)	Outlet in (mm)			
	SD 10	Air/Water/ Anti-Freeze/ Windshield Washer Fluid	3/8 (10)	50 (15)	1/2 (13)	3/8 (10)	300 (20.7)	HPL2D#	218549
			1/2 (13)	35 (11)	1/2 (13)	3/8 (10)	300 (20.7)	HPL2D#	
	SD 20		3/8 (10)	65 (20)	1/2 (13)	1/2 (13)	300 (20.7)	HPL6D#	
			1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	300 (20.7)	HPL6D#	
	SD 10	Oil	1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	2,000 (138)	HPM3B#	
	SD 20		1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	2,000 (138)	HPM6D#	
	SD 10	Grease	1/4 (6)	50 (15)	3/8 (10)	3/8 (10)	5,000 (345)	HPH1D#	218550
	SD 20		3/8 (10)	35 (11)	3/8 (10)	3/8 (10)	5,000 (345)	HPH1D#	
3/8 (10)			50 (15)	3/8 (10)	3/8 (10)	5,000 (345)	HPH5D#		

Ordering Information

SD 10 Oil Reel Packages

	Reel Size	Fluid	Valve Type	Enclosure	Package Number	Package Includes			
						Reel Assembly	Enclosure	Hose Inlet Kit	Meter
	SD 10	Oil	SDM8 Manual Meter with Rigid Extension	No	24E001	HPM33B	—	218549	25M404
				Yes	24D996	HPM33B	24A217	218549	25M404
SDM8 Manual Meter with Flexible Extension			No	24E002	HPM33B	—	218549	25M406	
			Yes	24D997	HPM33B	24A217	218549	25M406	
			None	Yes	24D995	HPM33B	24A217	218549	—

SD 10 Air/Water Reel Packages

	Reel Size	Fluid	Valve Type	Enclosure	Package Number	Package Includes				
						Reel Assembly	Enclosure	Hose Inlet Kit	Valve	Fitting
	SD 10	Water	Water Bib Dispense Valve	No	24D999	HPL23B	—	218549	180685	150287
Yes				24D993	HPL23B	24A217	218549	180685	150287	
				24D994	HPL33B	24A217	218549	180685	159842	
		Air	Tire Chuck Valve	No	24D998	HPL23B	—	218549	218545	—
Yes				24D992	HPL23B	24A217	218549	218545	—	
		Air/Water	None	Yes	24D989	HPL23B	24A217	218549	—	—
24D990					HPL25B	24A217	218549	—	—	
24D991					HPL33B	24A217	218549	—	—	

SD Series Hose Reel Accessories



Ordering Information

Enclosure Kits for One Reel

Open mounting accommodates up to six reels. Includes all parts necessary to mount on wall or ceiling. Requires mounting channel.

	Reel Size	White	Metallic Blue	Red	Black	Dark Blue	Yellow	Required End-Caps (set of 2)
	SD 10	24A217	24A940	24A941	24A942	24A943	24A944	24A950
	SD 20	24A218	24A945	24A946	24A947	24A948	24A949	24A951

Hose Inlet Kits

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

	Maximum Working Pressure psi (bar)	Size in (mm)	Length ft (m)	Part Number
	2,000 (137)	1/2 (13)	2 (0.6)	218549
	4,000 (276)	3/8 (10)		218550
	5,000 (345)	1/4 (6)		224417

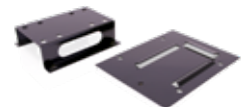
Ball Stop Kits

SD 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

Mounting Channels

Accommodates up to six reels. Includes all parts necessary to mount on wall or ceiling.

	Description	1 Reel	2 Reels	3 Reels	4 Reels	5 Reels	6 Reels
	Enclosed Reel Mounting Channel	203521	203522	203523	203524	203525	203526
	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.

Ordering Information

Swivel Mounting Bracket

Allows reel to swivel 120° with two lockable positions.

	Part Number	Description
	24N444	Swivel mounting bracket for installing SD 10 reels

Easy Slide-In Mount

Allows reel to slide in and out of mount for easy installation.

	Part Number	Description
	24H193	Ceiling or wall slide-in mount for SD 10 or SD 20 reels

Retrofit Adapter Kits

	Part Number	Description
	24C100	Includes all parts to mount an SD 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
	17S659	Red
	17S660	Blue
	17S661	Green
	17S662	Yellow
	17S663	White

SD Series Cord and Light Reels

Quality Cord and Light Reels

Organize your work space for a safer, more productive work environment. Make Graco your single source for your entire reel bank.

**2 Year
Warranty!**

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, ceilings 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.



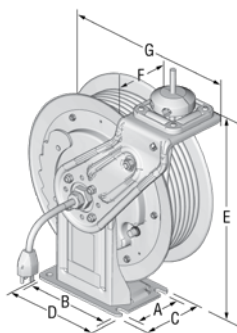
UL/CSA Approved

Typical Applications

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

Dimensions

	SD Series 5	SD Series 10
A	3.5 in (89 mm)	3.5 in (89 mm)
B	6.38 in (162 mm)	7.5 in (191 mm)
C	4.7 in (120 mm)	4.7 in (120 mm)
D	7.48 in (190 mm)	9 in (229 mm)
E	14.8 in (376 mm)	19.5 in (498 mm)
F	6.6 in (168 mm)	7 in (177 mm)
G	13.84 in (352 mm)	17.5 in (445 mm)



Technical Specifications

Operating Temperature Range

Cord Reels	-22°F to 122°F (-30°C to 50°C)
Light Reels	-4°F to 104°F (-20°C to 40°C)

Weight without Accessories

120V	SD 5	16 AWG, Length 35 ft	25.4 lb
		16 AWG, Length 50 ft	27.6 lb
		12 AWG, Length 35 ft	28.2 lb
		12 AWG, Length 50 ft	32.0 lb
120V	SD 10	16 AWG, Length 95 ft	46.3 lb
		12 AWG, Length 95 ft	51.8 lb

Instruction Manual	3A2592
--------------------	--------

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
	No Accessory – Cord Only	SD 5	12	20	50 ft (15 m)	SJ00W	24Y859
		SD 10	12	18	95 ft (29 m)	SJ00W	24Y880
		SD 5	16	13	50 ft (15 m)	SJTOW	24Y861
	Single Industrial Receptacle	SD 5	12	20	35 ft (11 m)	SJ00W	24Y862
		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
	LED Light	SD 5	16	<1	35 ft (11 m)	SJTOW	24Y869
		SD 5	16	<1	50 ft (15 m)	SJTOW	24Y870
		SD 10	16	<1	95 ft (29 m)	SJTOW	24Y886
	LED Light with In-line Tool Tap	SD 5	16	12	35 ft (11 m)	SJTOW	24Y871
		SD 5	16	12	50 ft (15 m)	SJTOW	24Y872
		SD 10	16	10	95 ft (29 m)	SJTOW	24Y887

SD Series Cord and Light Reels

Accessory Ordering Information

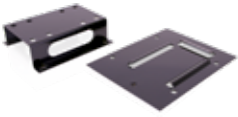
Enclosure Kits

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 227.

	Reel Size	White	Metallic Blue	Red	Black	Dark Blue	Yellow	Required End-Caps (set of 2)
	SD 5 with size 10 enclosure	24N690	24N682	24N683	24N684	24N691	24N685	24A950
	SD 10 with size 10 enclosure	24A217	24A940	24A941	24A942	24A943	24A944	24A950

Mounting Channels

Accommodates up to six reels. Includes all parts necessary to mount on wall or ceiling.

	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 Mounting Channel	SD 5	24N674	24N675	—	—	—	—
		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.

Ordering Information

Swivel Mounting Bracket

Allows reel to swivel 120° with two lockable positions.

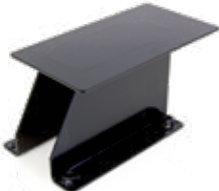
	Reel Size	Part Number	Description
	SD 5	24N814	Swivel mounting bracket for installation
	SD 10	24N444	Swivel mounting bracket for installation

Wall/Ceiling Mounting Bracket

Allows you to slide the reel in and out for easy installation.

	Reel Size	Part Number	Description
	SD 5	24N686	Wall/ceiling easy mount plate kit
	SD 10	24H193	Wall/ceiling 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

XD Series Hose Reels

10 / 20 / 20 HN



**7 Year
Warranty!**

Extreme Performer

The high-performance and heavy-duty XD Series Hose Reel is ideal for rugged indoor and outdoor use in truck dealerships, fleet maintenance, mining maintenance, public works garages, construction vehicle maintenance and service trucks. Features high-strength dual pedestals for reliable performance in extreme applications.



Spring Adjustment

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 six arm positions to fit your application. Order with arm (HS models) or without (HN models).

Durable Finish

Baked-on enamel finish (three 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
- Anti-freeze
- Windshield washer fluid

Technical Specifications

Operating Temperature Range

Air/Water/Anti-Freeze/ 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/Anti-Freeze/ Windshield Washer Fluid	Zinc plated 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	80 dB(A)
----------------------	----------

Sound Power Level	88 dB(A)
-------------------	----------

Instruction Manual	313431
--------------------	--------



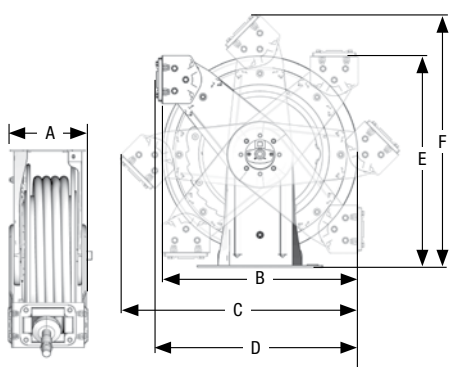
XD Series Hose Reels

10 / 20 / 20 HN

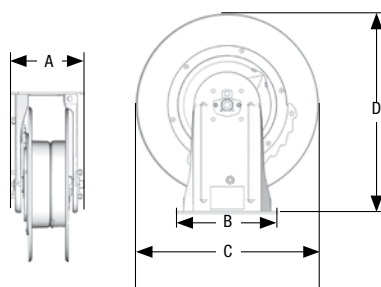
Dimensions

	HS Models (with Adjustable Arm)		HN Models (without Arm)
	XD 10	XD 20	XD 20
A	7.5 in (196 mm)	7.5 in (196 mm)	7.5 in (196 mm)
B	16.2 in (412 mm)	18.1 in (460 mm)	18.1 in (460 mm)
C	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)
E	18.5 in (470 mm)	21.0 in (533 mm)	21.0 in (533 mm)
F	22.5 in (571 mm)	25.2 in (640 mm)	25.2 in (640 mm)

HS Models

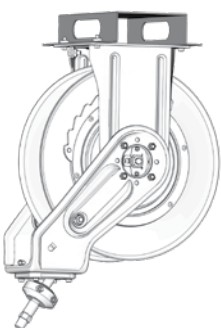


HN Models

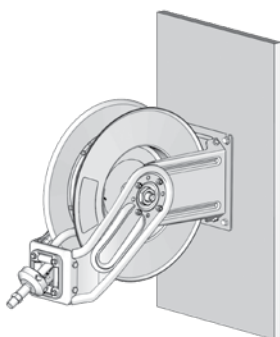


Typical Mounting Configurations

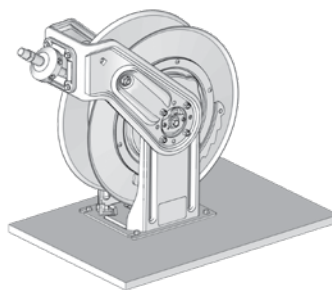
Ceiling Mount



Wall Mount



Bench/ Truck Mount



Truck Mount with Remote Mounted Roller Guide



Metallic Blue (B)
Standard In-Stock Color



**Available in
3 Colors**
Consult factory for
lead times.

Yellow (F)



White (A)



XD Series Hose Reels

10 / 20 / 20 HN



Ordering Information

XD 10/20 Reel Assembly Ordering Guide

XD Series reels are available in three colors. Use the chart below to determine the correct part number to order. The last character of each part number indicates the hose reel color.

Reel Color	Identifier
White	A
Metallic Blue	B
Yellow	F

Order Example:

Arm in bench/truck mount position,
XD 20, oil, 1/2 in ID hose, 50 ft hose length

1 Select your reel position: **HSM65#**

2 Select your reel color: **Metallic Blue = "B"**
(from Reel Assembly Ordering Guide – opposite)

Order Part Number: **HSM65B**



HS Models (with Adjustable Arm)

Reel Assemblies

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

	Reel Size	Fluid	Hose (Included)		Connection Size		Maximum Pressure psi (bar)	Assembly Part Number	Recommended Hose Inlet Kit
			ID in (mm)	Length ft (m)	Inlet	Outlet			
	XD 10	Air/Water/Anti-Freeze/Windshield Washer Fluid	3/8 (10)	50 (15)	1/2 NPSM(M)	3/8 NPT(M)	300 (20.7)	HSL25#	218549
			1/2 (13)	35 (11)	1/2 NPSM(M)	1/2 NPT(M)	300 (20.7)	HSL33#	
		Oil	1/2 (13)	35 (11)	1/2 NPSM(M)	1/2 NPT(M)	2,000 (138)	HSM33#	
		Grease	1/4 (6)	50 (15)	3/8 NPSM(M)	1/4 NPT(M)	5,000 (552)	HS15#	
	XD 20	Air/Water/Anti-Freeze/Windshield Washer Fluid	3/8 (10)	65 (20)	1/2 NPSM(M)	3/8 NPT(M)	300 (20.7)	HSL56#	218549
			1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	300 (20.7)	HSL65#	
		Oil	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	2,000 (138)	HSM65#	
		Grease	3/8 (10)	50 (15)	3/8 NPSM(M)	1/4 NPT(M)	4,800 (331)	HS55#	

Bare Reels

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

	Reel Size	Fluid	Hose (Not Included)		Connection Size		Maximum Pressure psi (bar)	Part Number	Recommended Hose Inlet Kit
			ID in (mm)	Length ft (m)	Inlet	Outlet			
	XD 10	Air/Water/Anti-Freeze/Windshield Washer Fluid	3/8 (10)	65 (20)	1/2 NPSM(M)	3/8 NPSM(F)	300 (20.7)	HSL2D#	218549
		Oil	1/2 (13)	35 (11)	1/2 NPSM(M)	1/2 NPSM(F)	2,000 (138)	HSM3B#	
		Grease	3/8 (10)	35 (11)	3/8 NPSM(M)	3/8 NPSM(F)	8,000 (552)	HS1D#	
	XD 20	Air/Water/Anti-Freeze/Windshield Washer Fluid	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPSM(F)	300 (20.7)	HSL6D#	218549
		Oil	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPSM(F)	2,000 (138)	HSM6D#	
		Grease	3/8 (10)	50 (15)	3/8 NPSM(M)	3/8 NPSM(F)	8,000 (552)	HS5D#	



XD Series Hose Reels

10 / 20 / 20 HN

Ordering Information

HN Models (without Adjustable Arm)

Required hose inlet kit sold separately.

	Reel Size	Fluid	Hose (Included)		Connection Size		Maximum Pressure psi (bar)	Bare Reel, Hose Assembly Part Number	Recommended Hose Inlet Kit
			ID in (mm)	Length ft (m)	Inlet	Outlet			
	XD 20	Air/Water/ Anti-Freeze/ Windshield Washer Fluid	3/8 (10)	65 (20)	1/2 NPSM(M)	3/8 NPT(M)	300 (20.7)	HNL56#	218549
			1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	300 (20.7)	HNL65#	
		Oil	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	2,000 (138)	HNH65#	218550
		Grease	3/8 (10)	50 (15)	3/8 NPSM(M)	1/4 NPT(M)	4,800 (331)	HNH55#	

HN Model Specialty Packages (without Adjustable Arm)

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

	Reel Size	Fluid	Hose (Included)		Connection Size		Maximum Pressure psi (bar)	Part Number			Hose Guide Kit (Included)	Recommended Hose Inlet Kit
			ID in (mm)	Length ft (m)	Inlet	Outlet		Metallic Blue	White	Yellow		
	XD 20	Air/Water/ Anti-Freeze/ Windshield Washer Fluid	3/8 (10)	65 (20)	1/2 NPSM(M)	3/8 NPT(M)	300 (20.7)	24C246	24C245	24C247	15Y478	218549
			1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	300 (20.7)	24C249	24C248	24C250		
		Oil	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	2,000 (138)	24C252	24C251	24C253		
		Grease	3/8 (10)	50 (15)	3/8 NPSM(M)	1/4 NPT(M)	4,800 (331)	24C255	24C254	24C256		218550

Hose and Cord Reels

XD Series Hose Reel Accessories



10 / 20 / 20 HN

Ordering Information

Ball Stop Kits

XD HS models include ball stop kits. Order separately if ordering a bare reel or if needed with HN models.

	Part Number	Description
	222225	For 1/4 in (6 mm) ID hose (not compatible with XD30, 700 or 750)
	218340	For 1/4 in to 3/8 in (6 mm to 10 mm) ID hose (not for use with XD30, 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 XD30, 700 or 750)
	237872	1.0 in ID used for 5/8 in (16 mm) hose
	237873	1.123 in ID used for 3/4 in (19 mm) hose
	237874	1.374 in ID used for 1 in (25 mm) hose
	24D132	For 3/8 in (10 mm) ID hose
	24D133	For 1/2 in (13 mm) ID hose

Hose Inlet Kits

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

	Maximum Working Pressure psi (bar)	Size in (mm)	Length ft (m)	Part Number
	2,000 (137)	1/2 (13)	2 (0.6)	218549
	4,000 (276)	3/8 (10)		218550
	5,000 (345)	1/4 (6)		224417

Mounting Channels

Accommodates up to six reels. Includes all parts necessary to mount on wall or ceiling.

	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.



XD Series Hose Reel Accessories

10 / 20 / 20 HN

Ordering Information

Enclosure Kits for One Reel

Open mounting accommodates up to six reels. Includes all parts necessary to mount on wall or ceiling. Requires Enclosed Reel Mounting Channel.

	Reel Size	White	Metallic Blue	Red	Black	Dark Blue	Yellow	Required End-Caps (set of 2)
	XD 10	24N331	24N332	24N333	24N334	24N335	24N336	24A950
	XD 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 XD20 hose reels to fit existing 500 series enclosures

Valve Hanger Kit

	Part Number	Description
	224444	Mounts to side of reel to allow hanging of non-metered and high-flow dispensing valves

Self-Adhesive Identification Label Set

	Part Number	Description
	180698	Set includes: 1 in x 5 in (25.4 mm x 127 mm) hose reels labels for Anti-Freeze, 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
	17S659	Red
	17S660	Blue
	17S661	Green
	17S662	Yellow
	17S663	White

XD Series Hose Reels



30 / 30 HN

**7 Year
Warranty!**

High Capacity Reel

Used in applications requiring longer-range dispense and higher capacity than the standard XD 10/20 series. Ideal for use on mobile service trucks, heavy construction and industrial plants.



Spring Adjustment

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.

Hose and Cord Reels

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
- Anti-freeze
- Windshield washer fluid
- Pressure wash
- Waste oil evacuation
- Diesel exhaust fluid (DEF)

Technical Specifications

Operating Temperature Range

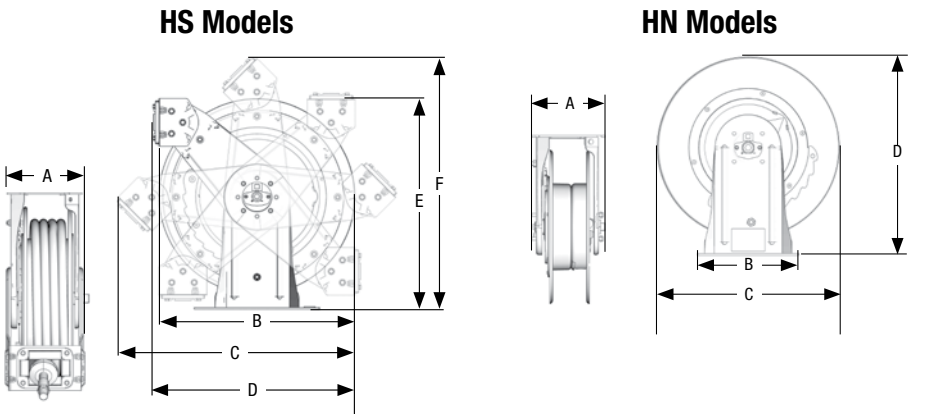
Air/Water/Anti-Freeze/ Windshield Washer Fluid	-40°F to 180°F (-40°C to 82°C)
Oil	-40°F to 180°F (-40°C to 82°C)
Grease	-40°F to 180°F (-40°C to 82°C)
Pressure Wash	-20°F to 225°F (-28°C to 107°C)
Fuel/Evacuation	-40°F to 120°F (-40°C to 49°C)
Diesel Exhaust Fluid (DEF)	12°F to 140°F (-11°C to 60°C)

Wetted Parts (Bare Reel Only)

Air/Water/Anti-Freeze/ 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

Dimensions		
	HS Models (with Adjustable Arm)	HN Models (without Arm)
A	9.0 in (229 mm)	7.5 in (196 mm)
B	21.5 in (546 mm)	18.1 in (460 mm)
C	26.0 in (659 mm)	23.4 in (594 mm)
D	22.1 in (562 mm)	20.0 in (508 mm)
E	23.1 in (588 mm)	21.0 in (533 mm)
F	27.6 in (701 mm)	25.2 in (640 mm)



Typical Mounting Configurations

Ceiling Mount

Wall Mount

Bench/ Truck Mount

Truck Mount with Remote Mounted Roller Guide

Metallic Blue (B)
Standard In-Stock Color

Yellow (F)

White (A)

Desert Sand (G)

Available in 4 Colors
Consult factory for lead times.

XD Series Hose Reels



30 / 30 HN

Ordering Information

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	A
Metallic Blue	B
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#**

2 Select your reel color: **Metallic Blue = "B"**
(from Reel Assembly Ordering Guide – opposite)

Order Part Number: **HSMD5B**



HS Models (with Adjustable Arm)

Reel Assemblies

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

Fluid	Hose (Included)		Connection Size		Maximum Pressure psi (bar)	Reel, Hose and Ball Stop Assembly Part Number	Recommended Hose Inlet Kit
	ID in (mm)	Length ft (m)	Inlet	Outlet			
Air/Water/Anti-Freeze/Windshield Washer Fluid	1/2 (13)	75 (23)	1/2 NPSM(M)	1/2 NPT(M)	300 (20.7)	HSLC8#	218549
	3/4 (19)	50 (15)	3/4 NPSM(M)	3/4 NPT(M)	300 (20.7)	HSLD5#	24E284
Oil	1/2 (13)	75 (23)	1/2 NPSM(M)	1/2 NPT(M)	1,500 (103)	HSMC8#	218549
	3/4 (19)	50 (15)	3/4 NPSM(M)	3/4 NPT(M)	1,250 (86)	HSMD5#	24E284
Grease	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	5,000 (345)	HSCH5#	24E283
	3/8 (10)	75 (23)	1/2 NPSM(M)	3/8 NPT(F)	5,000 (345)	HSBH7#	24E283
Pressure Wash	3/8 (10)	75 (23)	1/2 NPSM(M)	3/8 NPT(M)	4,000 (276)	HSPB8#	24E283
	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	4,500 (310)	HSPC5#	24E283
Fuel/Oil Evacuation	1 (13)	30 (9)	3/4 NPSM(M)	1 NPT(M)	125 (8.6)	HSLE3#	24E285
DEF	3/4 (19)	50 (15)	3/4 BSPP(M)	3/4 BSPP ORB	50 (3.4)	HSDD5#	24W250 (BSPP)

Bare Reels

Required hose inlet kit sold separately.

Fluid	Hose (Not Included)		Connection Size		Maximum Pressure psi (bar)	Part Number	Recommended Hose Inlet Kit
	ID in (mm)	Length ft (m)	Inlet in (mm)	Outlet in (mm)			
Oil	1/2 (13)	75 (23)	1/2 (13) (m)	1/2 (13) (m)	2,000 (138)	HSMCF#	218549
	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)	HSCHD#	24E283
Pressure Wash	3/8 (10)	75 (23)	1/2 (13) (m)	3/8 (10) (m)	4,000 (276)	HSCHF#	24E283
DEF	3/4 (19)	50 (15)	3/4 (19) (m)	3/4 (19) ORB	50 (3.4)	HSDDD#	24W250 (BSPP)

Ordering Information

HN Models (without Adjustable Arm)

Reels with Hose

Required hose inlet kit sold separately.

	Fluid	Hose (Included)		Connection Size		Maximum Pressure psi (bar)	Reel and Hose Assembly Part Number	Recommended Hose Inlet Kit
		ID in (mm)	Length ft (m)	Inlet	Outlet			
	Air/Water/Anti-Freeze/ Windshield Washer Fluid	1/2 (13)	75 (23)	1/2 NPSM(M)	1/2 NPT(M)	300 (20.7)	HNLC8#	218549
		3/4 (19)	50 (15)	3/4 NPSM(M)	3/4 NPT(M)	300 (20.7)	HNLD5#	24E284
	Oil	1/2 (13)	75 (23)	1/2 NPSM(M)	1/2 NPT(M)	1,500 (103)	HNMC8#	218549
		3/4 (19)	50 (15)	3/4 NPSM(M)	3/4 NPT(M)	1,250 (86)	HNMD5#	24E284
	Grease	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	5,000 (345)	HNHC5#	24E283
		3/8 (10)	75 (23)	1/2 NPSM(M)	3/8 NPT(F)	5,000 (345)	HNHB7#	24E283
	Pressure Wash	3/8 (10)	75 (23)	1/2 NPSM(M)	3/8 NPT(M)	4,000 (276)	HNPB8#	24E283
		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)		Connection Size		Maximum Pressure psi (bar)	Part Number	Recommended Hose Inlet Kit
		ID in (mm)	Length ft (m)	Inlet in (mm)	Outlet in (mm)			
	Oil	3/4 (19)	50 (15)	3/4 (19) (m)	3/4 (19) (m)	2,000 (138)	HNMD5#	24E284
	Grease	1/2 (13)	50 (15)	1/2 (13) (m)	1/2 (13) (m)	5,000 (345)	HNHC5#	24E283
	Pressure Wash	3/8 (10)	75 (23)	1/2 (13) (m)	3/8 (10) (m)	4,000 (276)	HNHFF#	24E283

Ball Stop Kits

XD HS models include ball stop kits. Order separately if ordering a bare reel or if needed with HN models.

	Part Number	Description
	222225	For 1/4 in (6 mm) ID hose (not compatible with XD30, 700 or 750)
	218340	For 1/4-3/8 in (6-10 mm) ID hose (not for use with XD30, 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 XD30, 700 or 750)
	237872	1.0 in ID used for 5/8 in (16 mm) hose
	237873	1.123 in ID used for 3/4 in (19 mm) hose
	237874	1.374 in ID used for 1 in (25 mm) hose
	24D132	For 3/8 in (10 mm) ID hose
	24D133	For 1/2 in (13 mm) ID hose

XD Series Hose Reel Accessories



30 / 30 HN

Ordering Information

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

Self-Adhesive Identification Label Set

	Part Number	Description
	180698	Set includes: 1 in x 5 in (25.4 mm x 127 mm) hose reels labels for Anti-Freeze, 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
	17S659	Red
	17S660	Blue
	17S661	Green
	17S662	Yellow
	17S663	White



**7 Year
Warranty!**

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

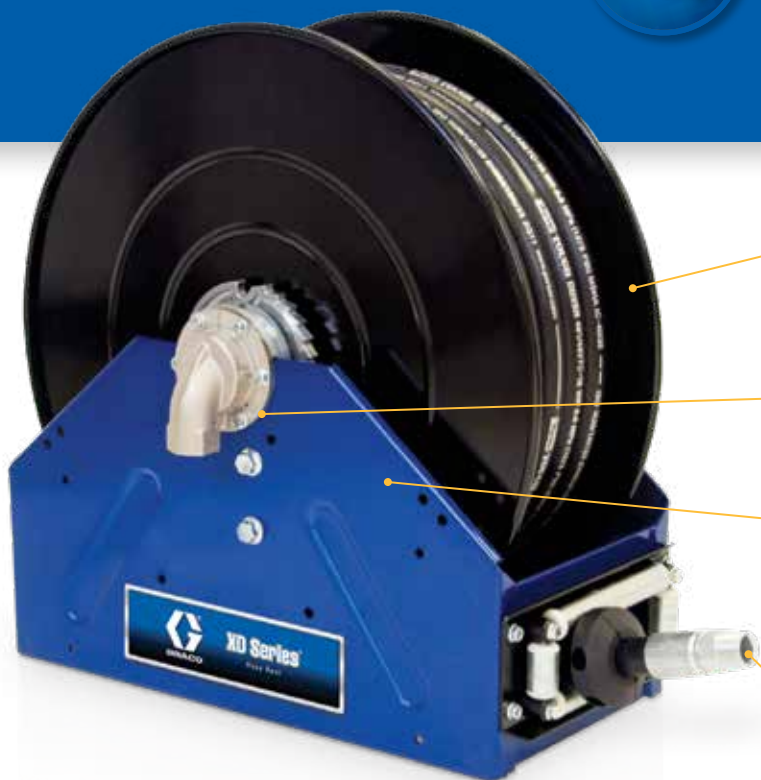
Maximize material flow with minimal pressure drop for faster fills to get more vehicles through your shop.

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
- Anti-freeze
- Waste oil evacuation

Technical Specifications

Operating Temperature Range	
Oil Reels – 1 inch	-20°F to 180°F (-28°C to 82°C)
All Other Reels	-40°F to 180°F (-40°C to 82°C)
Wetted Parts	Carbon steel, nickel plated cast iron, Buna-N rubber, FKM UHMWPE
Maximum Recommended Mounting Height	15 ft (4.6 m)
Sound Pressure Level	77.6 dB(A)
Sound Power Level	86.8 dB(A)

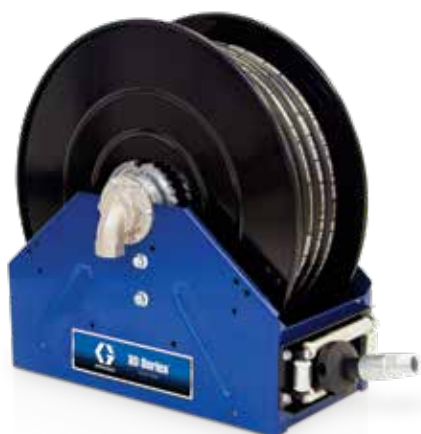
How to Select an XD 40/50 Hose Reel

2 Ways to Order!

Option 1 – Reel with Hose

(Pages 242-243)

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



Option 2 – Bare Reel

(Pages 242-243)

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



Choose Your Accessories (Pages 244)

Hose Inlet Kit

A hose inlet is required for installation. They are appropriately sized for the hose reels based on type of fluid, hose size and pressure.



Support Arm

For additional support, add arm brackets to the reel. Required for overhead mounting applications.



Mounting Kit

Overhead mounting options available for XD 40 reels.



Hose Kit

Large selection of hoses appropriately sized for the hose reels based on type of fluid, hose size and pressure.



Hose Inlet Kit

A hose inlet is required for installation. They are appropriately sized for the hose reels based on type of fluid, hose size and pressure.



Ball Stop Kit

When the ball stop comes in contact with the hose guide, the hose is prohibited from rewinding.



Support Arm

For additional support, add arm brackets to the reel. Required for overhead mounting applications.



Mounting Kit

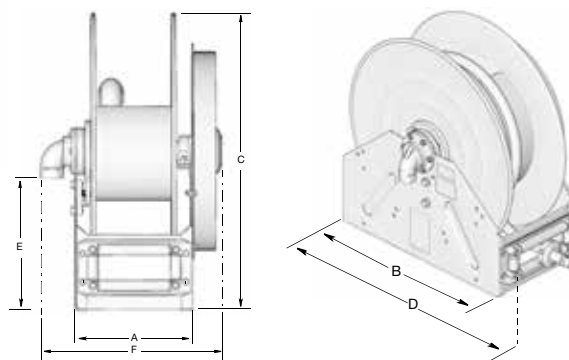
Overhead mounting options available for XD 40 reels.





XD Series Hose Reels

40 / 50



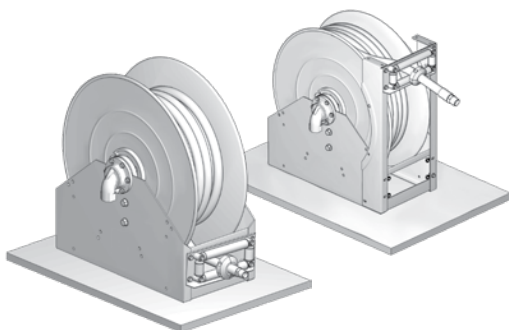
Dimensions

Model	Inlet/Outlet Size NPT(F)	Dimensions in (mm)*					
		A	B	C	D	E	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)

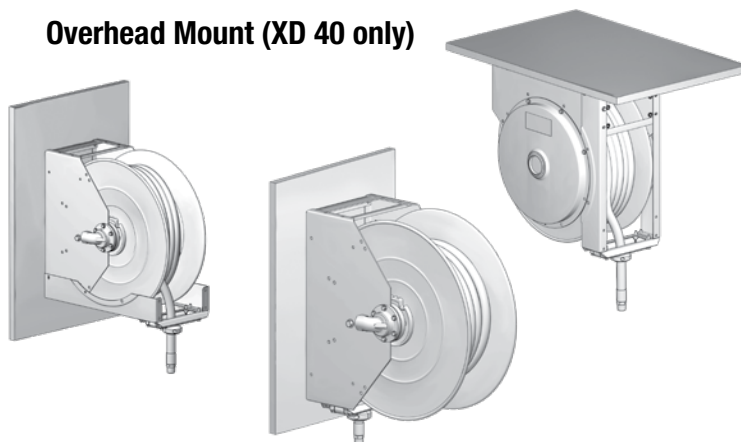
*For complete list of dimensions, see Graco product manual 3A2990.

Typical Mounting Configurations

Truck-Bed or Bench Mount



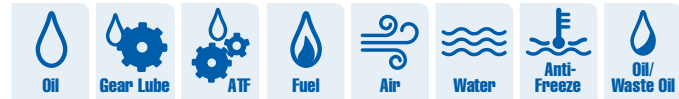
Overhead Mount (XD 40 only)



Standard In-Stock Color:
Metallic Blue



XD Series Hose Reels



40 / 50

Ordering Information

XD 40 Reels with Hose

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

	Reel Size	Fluid	Hose		Connection Size		Maximum Pressure psi (bar)	Part Number by Reel Color			Hose Inlet Kit (Order Separately)	Truck/Bench Mount Only
			ID in (mm)	Length ft (m)	Inlet NPT(F)	Outlet NPT(M)		Metallic Blue	Yellow	White		
	XD 4010	Air/Water	1/2 (13)	100 (30)	1	1/2	300 (21)	24P327	24P328	24P329	24R111	
			3/4 (19)	75 (23)	1	3/4	300 (21)	24P330	24P331	24P332		
			3/4 (19)	100 (30)	1	3/4	300 (21)	24P333	24P334	24P335		
			1 (25)	50 (15)	1	1	300 (21)	24P336	24P337	24P338		
		Anti-Freeze	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		
			3/4 (19)	75 (23)	1	3/4	1,500 (103)	24P342	24P343	24P344		•
			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		
			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

	Reel Size	Fluid	Hose Length Capacity (in x ft (m))			Connection Size		Maximum Pressure psi (bar)	Part Number by Reel Color			Hose Inlet Kit (order separately)	Truck/Bench Mount Only
			1/2	3/4	1	Inlet NPT(F)	Outlet NPT(F)		Metallic Blue	Yellow	White		
	XD 4010	Air/Water	100 (30)	75 (23)	50 (15)	1	1	600 (41)	24P313	24P315	24P316	24R111	
			—	100 (30)	—	1	1	600 (41)	24P317	24P318	24P319		
		Anti-Freeze	—	100 (30)	100 (30)	1	1	600 (41)	26A140	26A141	26A142		
		Oil	—	75 (23)	50 (15)	1	1	2,000 (138)	24P320	24P322	24P323		•
			—	75 (23)	50 (15)	1	1	2,000 (138)	24R854	24R855	24R856		
			100 (30)	100 (30)	—	1	1	2,000 (138)	24P324	24P325	24P326		
		Waste Oil Evacuation	—	—	75 (23)	1	1	600 (41)	24P317	24P318	24P319	24R112	
		Diesel Fuel	—	—	50 (15)	1	1	600 (41)	24P317	24P318	24P319	24R115	

Remember to Order!

			
Ball Stop Kit See page 244	Support Arm See page 244	Hose See page 256-257	Hose Inlet See page 244

Ordering Information

XD 50 Reels with Hose

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

	Reel Size	Fluid	Hose		Connection Size		Maximum Pressure psi (bar)	Part Number by Reel Color			Hose Inlet Kit (Order Separately)
			ID in (mm)	Length ft (m)	Inlet NPT(F)	Outlet NPT(M)		Metallic Blue	Yellow	White	
	XD 5010	Air/Water	1 (25)	75 (23)	1	1	300 (21)	24P470	24P471	24P472	24R111
			1 (25)	100 (30)	1	1	300 (21)	24P473	24P474	24P475	
		Anti-Freeze	1 (25)	100 (30)	1	1	300 (21)	24P987	24P988	24P989	
		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
			1 (25)	100 (30)	1	1	250 (17)	24P488	24P489	24P490	
	XD 5015**	Waste Oil Evacuation	1-1/4 (32)	35 (11)	1-1/2	1-1/4	200 (14)	24P479	24P480	24P481	-
			1-1/4 (32)	50 (15)	1-1/2	1-1/4	200 (14)	24P482	24P483	24P484	
		Diesel Fuel	1-1/4 (32)	35 (11)	1-1/2	1-1/4	250 (17)	24P491	24P492	24P493	24R117
			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 Victaulic™ -style groove on inlet.

XD 50 Bare Reels

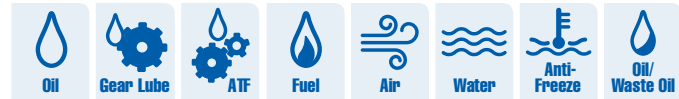
	Reel Size	Fluid	Hose Length Capacity (in x ft (m))			Connection Size		Maximum Pressure psi (bar)	Part Number by Reel Color			Hose Inlet Kit (order separately)
			1	1-1/4	1-1/2	Inlet NPT(F)	Outlet NPT(F)		Metallic Blue	Yellow	White	
	XD 5010	Air/Water	100 (30)	—	—	1	1	600 (41)	24P455	24P456	24P457	24R111
		Anti-Freeze	100 (30)	—	—	1	1	600 (41)	26A143	26A144	26A145	
		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**	Diesel Fuel	—	50 (15)	—	1-1/2	1-1/2	600 (41)	24P461	24P462	24P463	24R117
			—	50 (15)	50 (15)	1-1/2	1-1/2	600 (41)	24P467	24P468	24P469	
		—	—	50 (15)	50 (15)	1-1/2	1-1/2	600 (41)	24P467	24P468	24P469	

**Standard 2 inch Victaulic™ -style groove on inlet.

Remember to Order!

 Ball Stop Kit See page 244	 Support Arm See page 244	 Hose See page 256-257	 Hose Inlet See page 244
--	--	---	---

XD Series Hose Reel Accessories



40 / 50

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 ceiling mounting 1 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

	Part Number	Description
	180698	Set includes: 1 in x 5 in (25.4 mm x 127 mm) hose reels labels for Anti-Freeze, Water, SAE 5-40, SAE 10-40, SAE 20W, Hydraulic, Gear, SAE 10W, SAE 10-30, SAE 30W, Dexron, Air, Chassis, ATF

Hose Identification Wraps

Vinyl hose wrap for easy identification of meter fluid

	Part Number	Description
	17S659	Red
	17S660	Blue
	17S661	Green
	17S662	Yellow
	17S663	White

XD Series Powered Bare Hose Reels

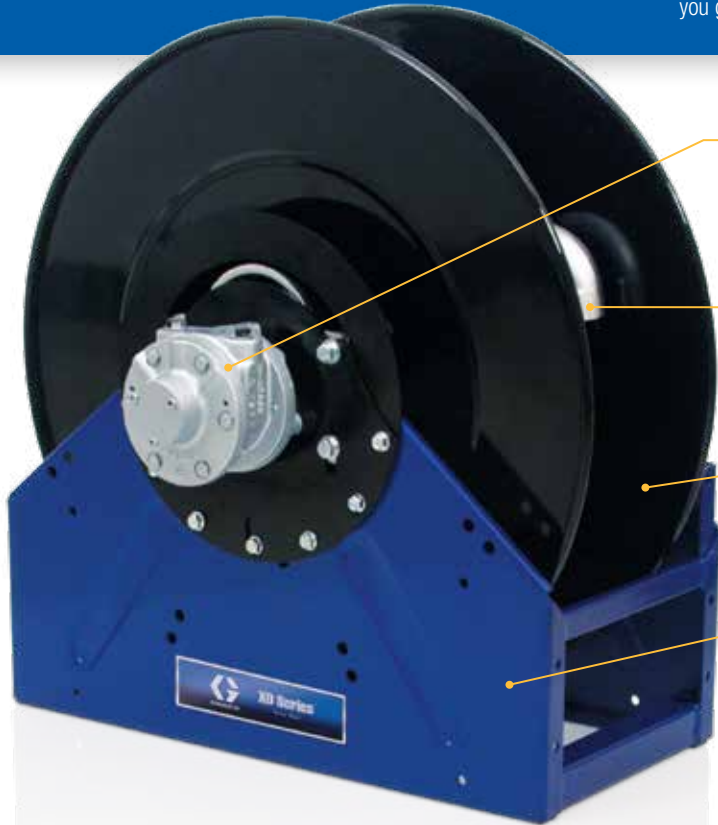
60 / 70 / 80



**7 Year
Warranty!**

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

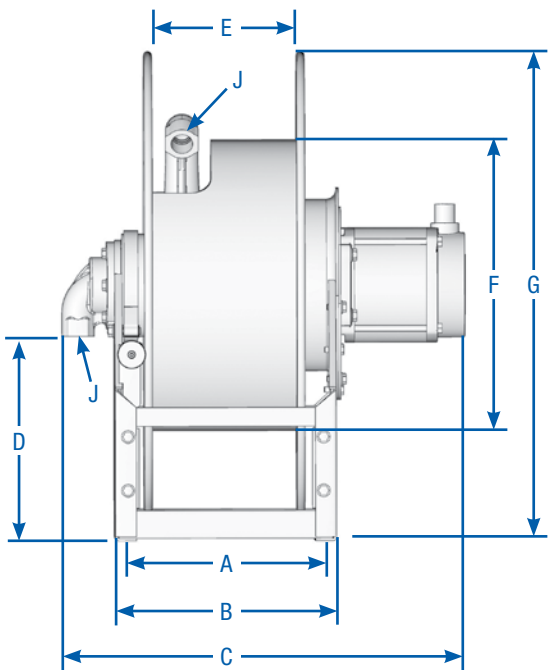
- Heavy-duty truck dealers
- Fleet maintenance
- Mining maintenance
- Public works garages
- Construction vehicle maintenance
- Heavy-duty mobile service trucks
- Agriculture
- Lube trucks

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

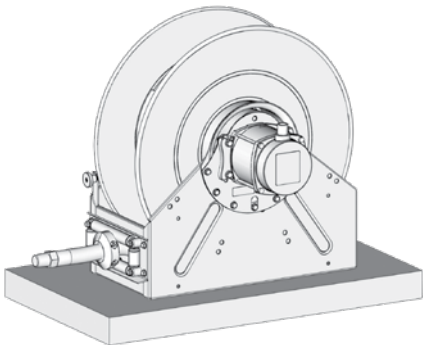


Dimensions
Reference dimension "D" for specific motor type

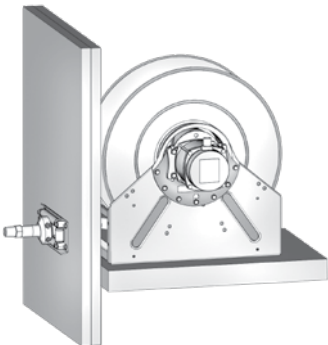
Model	Inlet/Outlet Size (J) NPT(F)	Dimensions in (mm)								
		A (Mounting Holes)	B	C			D	E	F	G
				Pneumatic	Hydraulic	Electric				
XD6010	1 in/1 in	10.45 (256)	11.8 (300)	20.4 (519)	15.7 (400)	21.6 (547)	10.9 (277)	7.8 (198)	15.5 (394)	26.1 (663)
XD7010	1 in/1 in	12.95 (329)	14.3 (363)	22.9 (583)	18.2 (463)	24.1 (611)	10.9 (277)	10 (254)	10 (254)	26.1 (663)
XD7015	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)
XD7020	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)
XD8010	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)
XD8015	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)
XD8020	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.



A

Specify the Hose Fluid Type and Capacity

Determine your fluid type and capacity before selecting your reel.

REQUIRED

Fluid Type	Hose ID in (mm)	Hose Length ft (m)
☐ Air/Water	☐ 1/2 (13)	☐ 50 (15)
☐ Anti-Freeze	☐ 1 (25)	☐ 75 (23)
☐ Petroleum- and Synthetic-Based Oils	☐ 1-1/2 (38)	☐ 100 (30)
☐ Waste Oil	☐ 2 (51)	☐ 150 (46)
☐ Diesel Fuel		

B

Choose Your Reel Size

☐ XD 60 ☐ XD 70 ☐ XD 80

C

Choose Your Reel Color

Select from Blue, Yellow or White.

☐ Blue ☐ Yellow ☐ White

D

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.

REQUIRED

- ☐ Order Reel with Motor Included (Pages 250-252)
- ☐ Order Reel and Motor Separately (Page 263)
 - ☐ Pneumatic Motor
 - ☐ Hydraulic Motor
 - ☐ Electric Motor
 - ☐ 12 VDC, 1/2 HP
 - ☐ 12 VDC, 2/3 HP
 - ☐ 24 VDC, 1/2 HP
 - ☐ 24 VDC, 2/3 HP
 - ☐ 115 VAC, 0.40 HP

E

Choose Your Controls (Pages 254)

- ☐ **Pneumatic Motor**
 - ☐ Pneumatic 2-position, 3-way valve
- ☐ **Hydraulic Motor**
 - ☐ 12 VDC electric control of hydraulic motor, 3-position, 4-way valve
 - ☐ 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)

F

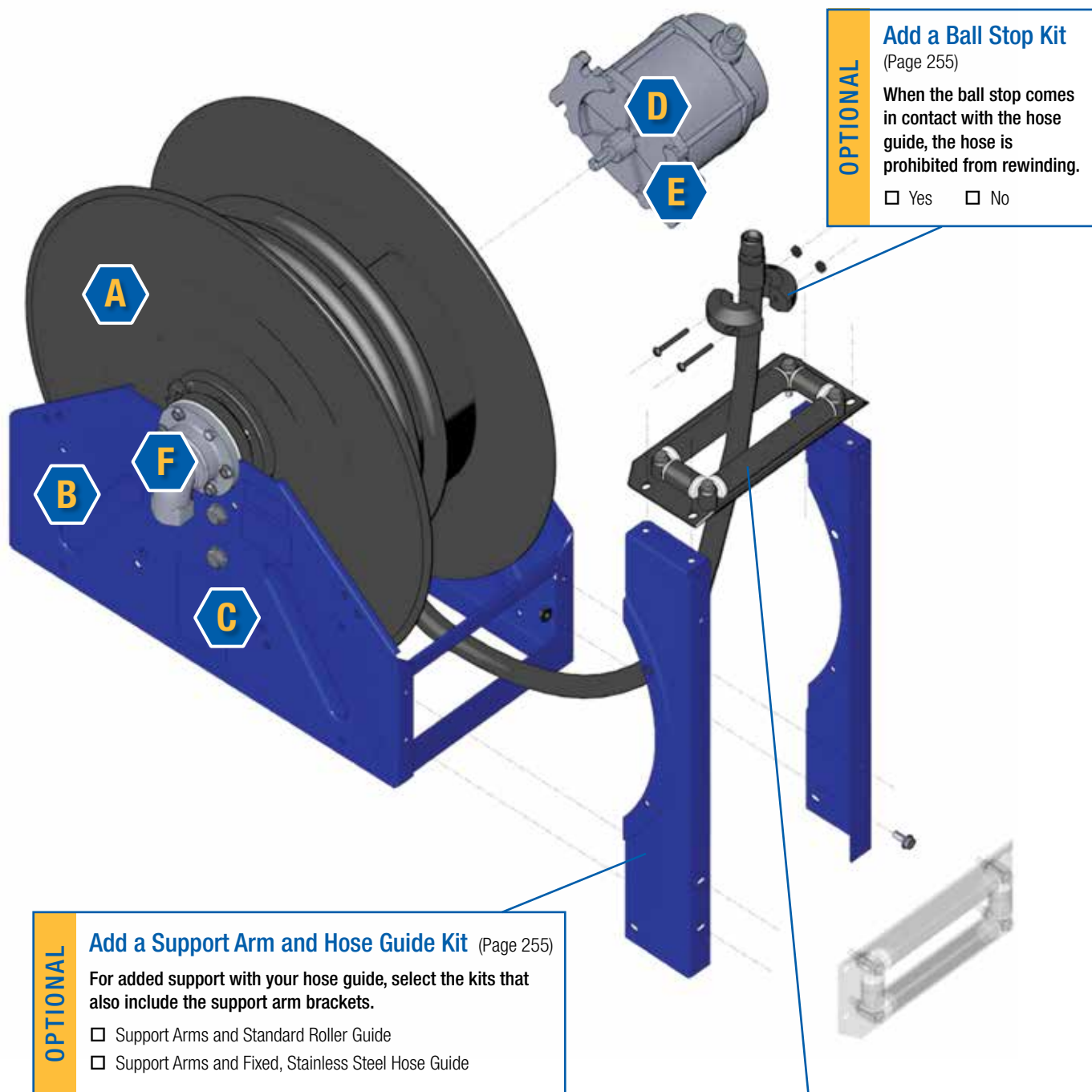
Hose Inlet Kit (Page 255)

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)

REQUIRED FOR INSTALLATION



OPTIONAL

Add a Ball Stop Kit

(Page 255)

When the ball stop comes in contact with the hose guide, the hose is prohibited from rewinding.

☐ Yes ☐ No

OPTIONAL

Add a Support Arm and Hose Guide Kit (Page 255)

For added support with your hose guide, select the kits that also include the support arm brackets.

- ☐ Support Arms and Standard Roller Guide
- ☐ Support Arms and Fixed, Stainless Steel Hose Guide

OPTIONAL

Add a Hose Guide Kit (Page 255)

Select between a fixed, stainless steel hose guide or a general roller guide.

Hose guide mounts directly to the reel frame or in three different positions on the support arm.

- ☐ Standard Roller Guide
- ☐ Fixed, Stainless Steel Hose Guide

XD Series Bare Hose Reels



60 / 70 / 80

Ordering Information

Reel with Motor – 1 in (25 mm) Inlet/Outlet

XD 60 Reels

	Reel Size	Fluid	Motor	Hose Capacity of Reel ft (m)			Maximum Pressure psi (bar)	Weight lb (kg)	Inlet/ Outlet Size NPT(F)	Reel Part Number by Color			Hose Accessories (Must be ordered separately)	
				Hose ID in (mm)						Metallic Blue	Yellow	White	Hose Inlet Kit	Hose
				1/2 (13)	3/4 (19)	1 (25)								
	XD 6010	Air/ Water	Pneumatic	100 (30)	100 (30)	50 (15)	600 (41)	123 (56)	1 in/1 in (25 mm/ 25 mm)	24R419	24R420	24R421	24R111	126359 – 1/2 in x 100 ft (13 mm x 30 m)
			Hydraulic	100 (30)	100 (30)	50 (15)	600 (41)	101 (45)		24R414	24R415	24R416		126360 – 3/4 in x 75 ft (19 mm x 23 m)
			12 VDC Electric, 1/2 HP	100 (30)	100 (30)	50 (15)	600 (41)	133 (60)		24R404	24R405	24R406		126361 – 3/4 in x 100 ft (19 mm x 30 m)
			24 VDC Electric, 1/2 HP	100 (30)	100 (30)	50 (15)	600 (41)	133 (60)		24R407	24R408	24R409		126362 – 1 in x 50 ft (25 mm x 15 m)
			115 VAC Electric	100 (30)	100 (30)	50 (15)	600 (41)	133 (60)		24R410	24R412	24R413		126375 – 1/2 in x 100 ft (13 mm x 30 m)
		Oil	Pneumatic	100 (30)	100 (30)	50 (15)	3,000 (207)	125 (56)	1 in/1 in (25 mm/ 25 mm)	24R434	24R435	24R436		126376 – 3/4 in x 75 ft (19 mm x 23 m)
			Hydraulic	100 (30)	100 (30)	50 (15)	3,000 (207)	103 (47)		24R431	24R432	24R433		126377 – 3/4 in x 100 ft (19 mm x 30 m)
			12 VDC Electric, 1/2 HP	100 (30)	100 (30)	50 (15)	3,000 (207)	134 (61)		24R422	24R423	24R424		126503 – 1 in x 50 ft (25 mm x 15 m)
			24 VDC Electric, 1/2 HP	100 (30)	100 (30)	50 (15)	3,000 (207)	134 (61)		24R425	24R426	24R427		
			115 VAC Electric	100 (30)	100 (30)	50 (15)	3,000 (207)	134 (61)		24R428	24R429	24R430		
	Diesel Fuel	Pneumatic	100 (30)	100 (30)	50 (15)	600 (41)	123 (56)	1 in/1 in (25 mm/ 25 mm)	24R419	24R420	24R421	24R115	24R102 – 1 in x 50 ft (25 mm x 15 m)	
		Hydraulic	100 (30)	100 (30)	50 (15)	600 (41)	101 (45)		24R414	24R415	24R416			
		12 VDC Electric, 1/2 HP	100 (30)	100 (30)	50 (15)	600 (41)	133 (60)		24R404	24R405	24R406			
		24 VDC Electric, 1/2 HP	100 (30)	100 (30)	50 (15)	600 (41)	133 (60)		24R407	24R408	24R409			
		115 VAC Electric	100 (30)	100 (30)	50 (15)	600 (41)	133 (60)		24R410	24R412	24R413			
	Waste Oil Evac.	Pneumatic	–	–	50 (15)	600 (41)	123 (56)	1 in/1 in (25 mm/ 25 mm)	24R419	24R420	24R421	24R112	126379 – 1 in x 50 ft (25 mm x 15 m)	
		Hydraulic	–	–	50 (15)	600 (41)	101 (45)		24R414	24R415	24R416			
		12 VDC Electric, 1/2 HP	–	–	50 (15)	600 (41)	133 (60)		24R404	24R405	24R406			
		24 VDC Electric, 1/2 HP	–	–	50 (15)	600 (41)	133 (60)		24R407	24R408	24R409			
		115 VAC Electric	–	–	50 (15)	600 (41)	133 (60)		24R410	24R412	24R413			
	Grease	Pneumatic	–	–	50 (15)	3,000 (207)	125 (75)	1 in/1 in (25 mm/ 25 mm)	24R434	24R435	24R436	–	–	
		Hydraulic	–	–	50 (15)	3,000 (207)	103 (47)		24R431	24R432	24R433			
		12 VDC Electric, 1/2 HP	–	–	50 (15)	3,000 (207)	134 (61)		24R422	24R423	24R424			
		24 VDC Electric, 1/2 HP	–	–	50 (15)	3,000 (207)	134 (61)		24R425	24R426	24R427			
		115 VAC Electric	–	–	50 (15)	3,000 (207)	134 (61)		24R428	24R429	24R430			

Remember to Order!

				
Ball Stop Kit See page 255	Hose Guide See page 255	Support Arm See page 255	Hose See page 256-257	Hose Inlet See page 255



XD Series Bare Hose Reels

60 / 70 / 80

Ordering Information

Reel with Motor – 1 in (25 mm) Inlet/Outlet

XD 70 / XD 80 Reels

	Reel Size	Fluid	Motor	Hose Capacity of Reel ft (m)	Maximum Pressure psi (bar)	Weight lb (kg)	Inlet/Outlet Size NPT(F)	Reel Part Number by Color			Hose Accessories (Must be ordered separately)	
				Hose ID 1 in (25 mm)				Metallic Blue	Yellow	White	Hose Inlet Kit	Hose
	XD 7010	Air/Water	Pneumatic	100 (30)	600 (41)	122 (55)	1 in/1 in (25 mm/25 mm)	24R449	24R450	24R451	24R111	126363 – 1 in x 75 ft (25 mm x 23 m)
			Hydraulic	100 (30)	600 (41)	100 (45)		24R446	24R447	24R448		126364 – 1 in x 100 ft (25 mm x 30 m)
			12 VDC Electric, 1/2 HP	100 (30)	600 (41)	132 (60)		24R437	24R438	24R439		
			24 VDC Electric, 1/2 HP	100 (30)	600 (41)	132 (60)		24R440	24R441	24R442		
			115 VAC Electric	100 (30)	600 (41)	132 (60)		24R443	24R444	24R445		
		Oil	Pneumatic	100 (30)	3,000 (207)	100 (56)	1 in/1 in (25 mm/25 mm)	24R464	24R465	24R466		126504 – 1 in x 75 ft (25 mm x 23 m)
			Hydraulic	100 (30)	3,000 (207)	102 (46)		24R461	24R462	24R463		126505 – 1 in x 100 ft (25 mm x 30 m)
			12 VDC Electric, 1/2 HP	100 (30)	3,000 (207)	133 (60)		24R452	24R453	24R454		
			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		
		Diesel Fuel	Pneumatic	100 (30)	600 (41)	122 (55)	1 in/1 in (25 mm/25 mm)	24R449	24R450	24R451	24R115	24R103 – 1 in x 75 ft (25 mm x 23 m)
			Hydraulic	100 (30)	600 (41)	100 (45)		24R446	24R447	24R448		24R106 – 1 in x 100 ft (25 mm x 30 m)
			12 VDC Electric, 1/2 HP	100 (30)	600 (41)	132 (60)		24R437	24R438	24R439		
			24 VDC Electric, 1/2 HP	100 (30)	600 (41)	132 (60)		24R440	24R441	24R442		
			115 VAC Electric	100 (30)	600 (41)	132 (60)		24R443	24R444	24R445		
	XD 8010	Air/Water	Pneumatic	150 (46)	600 (41)	164 (74)	1 in/1 in (25 mm/25 mm)	24R531	24R532	24R533	24R111	–
			Hydraulic	150 (46)	600 (41)	142 (64)		24R528	24R529	24R530		
			12 VDC Electric, 1/2 HP	150 (46)	600 (41)	173 (78)		24R519	24R520	24R521		
			24 VDC Electric, 1/2 HP	150 (46)	600 (41)	173 (78)		24R522	24R523	24R524		
			115 VAC Electric	150 (46)	600 (41)	173 (78)		24R525	24R526	24R527		
		Oil	Pneumatic	150 (46)	3,000 (207)	165 (75)	1 in/1 in (25 mm/25 mm)	24R546	24R547	24R548		–
			Hydraulic	150 (46)	3,000 (207)	143 (65)		24R543	24R544	24R545		
			12 VDC Electric, 1/2 HP	150 (46)	3,000 (207)	175 (79)		24R534	24R535	24R536		
			24 VDC Electric, 1/2 HP	150 (46)	3,000 (207)	175 (79)		24R537	24R538	24R539		
			115 VAC Electric	150 (46)	3,000 (207)	175 (79)		24R540	24R541	24R542		
		Diesel Fuel	Pneumatic	150 (46)	600 (41)	164 (74)	1 in/1 in (25 mm/25 mm)	24R531	24R532	24R533	24R115	24T252 – 1 in x 150 ft (25 mm x 46 m)
			Hydraulic	150 (46)	600 (41)	142 (64)		24R528	24R529	24R530		
			12 VDC Electric, 1/2 HP	150 (46)	600 (41)	173 (78)		24R519	24R520	24R521		
			24 VDC Electric, 1/2 HP	150 (46)	600 (41)	173 (78)		24R522	24R523	24R524		
			115 VAC Electric	150 (46)	600 (41)	173 (78)		24R525	24R526	24R527		

Hose and Cord Reels

Remember to Order!

				
Ball Stop Kit See page 255	Hose Guide See page 255	Support Arm See page 255	Hose See page 256-257	Hose Inlet See page 255

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 Size	Fluid	Motor	Hose Capacity of Reel ft (m)	Maximum Pressure psi (bar)	Weight lb (kg)	Inlet/Outlet Size NPT(F)	Reel Part Number by Color			Hose Accessories (Must be ordered separately)	
				Hose ID 1-1/2 in (38 mm)				Metallic Blue	Yellow	White	Hose Inlet Kit	Hose
	XD 7015	Diesel Fuel	Pneumatic	65 (20)	600 (41)	100 (56)	1-1/2 in / 1-1/2 in (38 mm/ 38 mm)	24R516	24R517	24R518	24R117	24R110 – 1-1/4 in x 50 ft (32 mm x 15 m)
			Hydraulic	65 (20)	600 (41)	102 (46)		24R512	24R513	24R515		24R114 – 1-1/2 in x 50 ft (38 mm x 15 m)
			12 VDC Electric, 1/2 HP	65 (20)	600 (41)	133 (60)		24R503	24R504	24R505		
			24 VDC Electric, 1/2 HP	65 (20)	600 (41)	133 (60)		24R506	24R507	24R508		
			115 VAC Electric	65 (20)	600 (41)	133 (60)		24R509	24R510	24R511		
		Waste Oil Evac.	Pneumatic	50 (15)	600 (41)	100 (56)		24R516	24R517	24R518	-	126380 – 1-1/4 in x 35 ft (32 mm x 11 m)
			Hydraulic	50 (15)	600 (41)	102 (46)		24R512	24R513	24R515		126688 – 1-1/4 in x 50 ft (32 mm x 15 m)
			12 VDC Electric, 1/2 HP	50 (15)	600 (41)	133 (60)		24R503	24R504	24R505		127173 – 1-1/2 in x 50 ft (38 mm x 15 m)
			24 VDC Electric, 1/2 HP	50 (15)	600 (41)	133 (60)		24R506	24R507	24R508		
			115 VAC Electric	50 (15)	600 (41)	133 (60)		24R509	24R510	24R511		
	XD 8015	Diesel Fuel	Pneumatic	100 (50)	600 (41)	165 (75)		24R561	24R562	24R563	24R117	24T253 – 1-1/2 in x 100 ft (38 mm x 30 m)
			Hydraulic	100 (50)	600 (41)	143 (65)		24R558	24R559	24R560		
			12 VDC Electric, 1/2 HP	100 (50)	600 (41)	175 (79)		24R549	24R550	24R551		
			24 VDC Electric, 1/2 HP	100 (50)	600 (41)	175 (79)		24R552	24R553	24R554		
			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 Size	Fluid	Motor	Hose Capacity of Reel ft (m)	Maximum Pressure psi (bar)	Weight lb (kg)	Inlet/Outlet Size NPT(F)	Reel Part Number by Color			Hose Accessories (Must be ordered separately)	
				Hose ID 2 in (51 mm)				Metallic Blue	Yellow	White	Hose Inlet Kit	Hose
	XD 7020	Diesel Fuel	Pneumatic	33 (10)	600 (41)	128 (58)	2 in/2 in (51 mm/ 51 mm)	24T023	24T024	24T025	24R118	127167 – 2 in x 33 ft (51 mm x 10 m)
			Hydraulic	33 (10)	600 (41)	106 (48)		24T020	24T021	24T022		
			12 VDC Electric, 1/2 HP	33 (10)	600 (41)	137 (62)		24T011	24T012	24T013		
			24 VDC Electric, 1/2 HP	33 (10)	600 (41)	137 (62)		24T014	24T015	24T016		
			115 VAC Electric	33 (10)	600 (41)	137 (62)		24T017	24T018	24T019		
		Diesel Fuel	Pneumatic	50 (15)	600 (41)	169 (76)		24R576	24R577	24R578		24T254 – 2 in x 50 ft (51 mm x 15 m)
			Hydraulic	50 (15)	600 (41)	147 (67)		24R573	24R574	24R575		
			12 VDC Electric, 1/2 HP	50 (15)	600 (41)	179 (81)		24R564	24R565	24R566		
			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		
	XD 8020	Diesel Fuel										

Remember to Order!

				
Ball Stop Kit See page 255	Hose Guide See page 255	Support Arm See page 255	Hose See page 256-257	Hose Inlet See page 255

Ordering Information

Reel Frames Only

XD 60 / XD 70 / XD 80 Reels

Motor is not included and must be purchased separately.



	Reel Size	Fluid	Hose Capacity of Reel ft (m)					Maximum Pressure psi (bar)	Weight lb (kg)	Inlet/Outlet Size NPT(F)	Reel Part Number by Color		
			Hose ID in (mm)								Metallic Blue	Yellow	White
			1/2 (13)	3/4 (19)	1 (25)	1-1/2 (38)	2 (51)						
	XD 6010	Air/Water/Diesel Fuel	100 (30)	100 (30)	50 (15)	–	–	600 (41)	87 (39)	1 in/1 in (25 mm/25 mm)	24T104	24T105	24T106
		Oil	100 (30)	100 (30)	50 (15)	–	–	3,000 (207)	88 (40)		24T107	24T108	24T109
		Waste Oil Evac.	–	–	50 (15)	–	–	600 (41)	87 (39)		24T104	24T105	24T106
		Grease	–	–	50 (15)	–	–	3,000 (207)	88 (40)		24T107	24T108	24T109
	XD 7010	Air/Water/Diesel Fuel	–	–	100 (30)	–	–	600 (41)	86 (39)		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
	XD 7015	Waste Oil Evac.	–	–	–	50 (15)	–	600 (41)	87 (39)	1-1/2 in/1-1/2 in (38 mm/38 mm)	24T116	24T117	24T118
			–	–	–	65 (20)	–	600 (41)	87 (39)		24T116	24T117	24T118
	XD 8015	Diesel Fuel	–	–	–	100 (30)	–	600 (41)	129 (58)		24T128	24T129	24T130
	XD 7020		–	–	–	–	33 (10)	600 (41)	91 (41)	24T119	24T120	24T121	
	XD 8020		–	–	–	–	50 (15)	600 (41)	133 (60)	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.
	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.

Remember to Order!

				
Ball Stop Kit See page 255	Hose Guide See page 255	Support Arm See page 255	Hose See page 256-257	Hose Inlet See page 255

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.
	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.
	127223	Hazardous-location push-button on/off switch. Use for 115 and 220 VAC.
	127218	Hazardous-location junction box
	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



XD Series Bare Hose Reel Accessories

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 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
	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)
	24T333	Arm kit with stainless steel hose guide for XD 70 (24T328)
	24T334	Arm kit with stainless steel hose guide for XD 80 (24T329)
	24T335	Arm kit with roller guide for XD 60 (24R072)
	24T336	Arm kit with roller guide for XD 70 (24T330)
	24T337	Arm kit with roller guide for XD 80 (24T331)

Hose Inlet Kits

	Part Number	Description
	24R111	1 in (25 mm) hose inlet kit for air/water and oil 1,275 psi (88 bar), 1 in NPT hose inlet ID, 28 in (710 mm) long
	24R112	1 in (25 mm) hose inlet kit for waste oil evacuation 250 psi (17 bar), 1 in NPT hose inlet ID, 28 in (710 mm) long
	24R115	1 in (25 mm) hose inlet kit for diesel fuel 250 psi (17 bar), 1 in NPT hose inlet ID, 28 in (710 mm) long
	24R117	1-1/2 in (38 mm) hose inlet kit for diesel fuel 150 psi (10 bar), 1-1/2 in NPT hose inlet ID, 28 in (710 mm) long
	24R118	2 in (51 mm) hose inlet kit for diesel fuel 150 psi (10 bar), 2 in NPT hose inlet ID, 28 in (710 mm) long
	24T858	1-1/2 in (38 mm) hose inlet kit for waste oil evacuation 150 psi (10 bar), 1-1/2 in NPT hose inlet ID, 28 in (710 mm) long

Self-Adhesive Identification Label Set

	Part Number	Description
	180698	Set includes: 1 in x 5 in (25.4 mm x 127 mm) hose reels labels for Anti-Freeze, Water, SAE 5-40, SAE 10-40, SAE 20W, Hydraulic, Gear, SAE 10W, SAE 10-30, SAE 30W, Dexron, Air, Chassis, ATF



Ordering Information

Hose Identification Wraps

Vinyl hose wrap for easy identification of meter fluid

	Part Number	Description
	17S659	Red
	17S660	Blue
	17S661	Green
	17S662	Yellow
	17S663	White

Air/Water/Anti-Freeze Hoses

	Part Number	Description	Compatible Reel Series
	253848	3/8 in x 35 ft (10 mm x 11 m) hose for air/water, 300 psi (20.6 bar)	SD 10, XD 10
	253849	3/8 in x 50 ft (10 mm x 15 m) hose for air/water, 300 psi (20.6 bar)	SD 10, XD 10
	253850	3/8 in x 65 ft (10 mm x 20 m) hose for air/water, 300 psi (20.6 bar)	SD 20, XD 20
	253852	1/2 in x 35 ft (13 mm x 11 m) hose for air/water, 300 psi (20.6 bar)	SD 10, XD 10
	253853	1/2 in x 50 ft (13 mm x 15 m) hose for air/water, 300 psi (20.6 bar)	SD 20, XD 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
	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)	SD 10, XD 10
	26C122	1/2 in x 50 ft (13 mm x 15 m) hose for oil, 2,000 psi (138 bar)	SD 20, XD 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	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

Ordering Information

Grease Hoses

	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)	SD 10, XD 10
	124470	3/8 in x 35 ft (10 mm x 11 m) hose for grease, 4,800 psi (331 bar)	SD 10, XD 10
	124461	3/8 in x 50 ft (10 mm x 15 m) hose for grease, 4,800 psi (331 bar)	SD 20, XD 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 Series
	16A686	1 in x 30 ft (25 mm x 9 m) hose for waste oil or fuel, 125 psi (9 bar)	XD 30
	126379	1 in x 50 ft (25 mm x 15 m) hose for waste oil, 250 psi (17 bar)	XD 40, XD 60
	126380	1 1/4 in x 35 ft (32 mm x 10.5 m) hose for waste oil, 200 psi (13.8 bar)	XD 50
	126688	1 1/4 in x 50 ft (32 mm x 15 m) hose for waste oil, 200 psi (13.8 bar)	XD 50
	127173	1 1/2 in x 50 ft (38 mm x 15 m) hose for waste oil, 200 psi (13.8 bar)	XD 50

Diesel Fuel Hoses

	Part Number	Description	Compatible Reel Series
	16A686	1 in x 30 ft (25 mm x 9 m) hose for waste oil or fuel, 125 psi (9 bar)	XD 30
	24R102	1 in x 50 ft (25 mm x 15 m) hose for diesel fuel, 250 psi (17 bar)	XD 40, XD 60
	24R103	1 in x 75 ft (25 mm x 23 m) hose for diesel fuel, 250 psi (17 bar)	XD 50
	24R106	1 in x 100 ft (25 mm x 30 m) hose for diesel fuel, 250 psi (17 bar)	XD 50, XD 70
	24T252	1 in x 150 ft (25 mm x 46 m) hose for diesel fuel, 250 psi (17 bar)	XD 80
	24R108	1 1/4 in x 35 ft (32 mm x 10.5 m) hose for diesel fuel, 250 psi (17 bar)	XD 50
	24R110	1 1/4 in x 50 ft (32 mm x 15 m) hose for diesel fuel, 250 psi (17 bar)	XD 50
	24R114	1 1/2 in x 50 ft (38 mm x 15 m) hose for diesel fuel, 150 psi (11 bar)	XD 50
	24T253	1 1/2 in x 100 ft (38 mm x 30 m) hose for diesel fuel, 150 psi (11 bar)	XD 80
	127167	2 in x 33 ft (51 mm x 10 m) hose for diesel fuel, 150 psi (11 bar)	XD 80
	24T254	2 in x 50 ft (51 mm x 15 m) hose for diesel fuel, 150 psi (11 bar)	XD 80

Diesel Exhaust Fluid (DEF) Hoses

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

Pressure Wash Hoses

	Part Number	Description	Compatible Reel Series
	16A688	3/8 in x 75 ft (10 mm x 23m) hose for pressure wash, 4,000 psi (276 bar)	XD 30
	126075	1/2 in x 50 ft (13 mm x 15 m) hose for pressure wash, 4,500 psi (310 bar)	XD 30

[illegible]

FLUID RECLAIM EQUIPMENT



	Page
Oil King™	260
Coolant King™	261
Oil Ace™	262-264
16-Gallon Mobile Receiver	265
Big Hauler™ Truck Drain	266
Track Receivers	266
Diaphragm Evacuation Pumps	267
Evacuation Pump Packages	268-270
Fluid Reclaim Accessories	271-273

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.

**5 Year
Warranty!**

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 l) Capacity Receiver

Made from a heavy-duty, durable UV stabilized polymer. Dent-, rust- and corrosion-resistant.

Oversized Tires

Easily maneuver over hose and rough floors.

Two Evacuation Port Options

Choose from the gravity drain valve at the bottom or suction evacuation at the top.



Typical Applications

- Automotive dealerships
- Fast lube centers
- Service shops
- Heavy-duty dealerships
- Fleet services facilities

Typical Fluids Handled

- Used oil

Technical Specifications

Fluid	Used Oil
Fluid Capacity	25 gal (95 l)
Evacuation	Bottom – Gravity / Top – Suction
Receiver Material	Polyethylene
Length	24 in (60 cm)
Width	24 in (60 cm)
Height	45 to 72 in (1.1 to 1.8 m)
Funnel Size	22 x 24 in (50 x 56 cm)
Dry Weight	54 lb
Instruction Manual	308667

Ordering Information

Part Number	Description
238866	25 gal (95 l) used-oil receiver with used-filter tray, tool holders and sight gauge. Must use wall mount package (224873) for topside evacuation.

Must ship via truck.



**5 Year
Warranty!**

Durable Receiver

Coolant King is designed with the busy shop in mind. With oversized tires and push-pull handles it allows for smooth maneuvering. The full-length sight gauge lets you know when the tank is full.

Large Offset Collection Pan

This funnel can be raised to a maximum height of 72 in (183 cm) and is equipped with a filter screen to prevent debris from entering the tank.

Convenient Tool Tray

Built-in holding bins for shop tools at your fingertips.

Liquid Sight Gauge

A full-length liquid-level sight gauge lets you know when the tank is full.

Large 25-Gallon (94.6 l) Capacity Receiver

Made from a heavy-duty, durable UV stabilized polymer. Dent-, rust- and corrosion-resistant. Color specific for easy fluid identification.

Oversized Tires

Easily maneuver over hose and rough floors.

Two Evacuation Port Options

Choose from the gravity drain valve at the bottom or suction-evacuation at the top.

Typical Applications

- Automotive dealerships
- Fast lube centers
- Service shops
- Heavy-duty dealerships
- Fleet services facilities

Typical Fluids Handled

- Used anti-freeze

Technical Specifications

Fluid	Anti-freeze
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-anti-freeze receiver with used-filter tray, tool holders and sight gauge. Must use wall mount package (224873) for topside evacuation.

Must ship via truck.

Pressurized Oil Drain

Drain, evacuate and transfer used oil reliably, quickly and in the most cost-effective manner.

**5 Year
Warranty!**

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 l) 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 l) 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

Technical Specifications

Fluid	Used oil
Tank Capacity	24 gallon (90 l)
Evacuation	Pressurized
Receiver Material	Steel
Length	24 in (61 cm)
Width	16 in (40.6 cm)
Height	39 to 70.8 in (99 to 180 cm)
Funnel Size	23.8 in (60 cm)
Dry Weight	50.7 to 73.2 lbs (23 to 33.2 kg)
Instruction Manual	310864



Ordering Information

	Part Number	Description
	26C061	24 gal (90 l) steel tank with suction probes and adapters
	26C062	24 gal (90 l) steel tank with suction probes, adapters and sight glass
	26C063	24 gal (90 l) steel tank with suction probes, adapters and oil drain funnel
	26C064	24 gal (90 l) steel tank with suction probes, adapters, sight glass and oil drain funnel



Typical Applications

- Automotive dealerships
- Fast lube centers
- Service shops
- Heavy-duty dealerships
- Fleet services facilities

Typical Fluids Handled

- Used oil

Technical Specifications

Fluid	Used oil
Fluid Capacity	16 gal (61 l)
Evacuation	Gravity
Receiver Material	Steel (239302 does not include drum)
Manual	306449
Length	26 in (66 cm)
Width	23 in (58 cm)
Height	42 to 70 in (107 to 177 cm)
Funnel Size	23 x 23 in (58 x 58 cm)
Dry Weight	40 lb (18 kg)

Ordering Information

Part Number	Description
239301*	16 gal (60 l) Oil receiver with steel drum oil receiver
239302	16 gal (60 l) Oil receiver without drum

*Use with evacuation kit 224873 or 24E166. 240832 can be ordered separately for existing diaphragm pump evacuation systems.

Accessories

Funnel Kit

Part Number	Description
243650	Use with 238866, 239301, 239302 and 248632. Includes tray and pipe.

Wall-Mounted Funnel Drain

Part Number	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.

Big Hauler™ Truck Drain



Typical Applications

- Truck maintenance facility
- Heavy-duty dealerships
- Fleet services facilities

Typical Fluids Handled

- Used oil

Technical Specifications

Fluid	Used 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 diaphragm pump evacuation systems.

Track Receivers



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

Typical Applications

- Fast lube centers
- Fleet services facilities

Typical Fluids Handled

- Used oil

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

Husky 1050



Husky 716



Technical 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

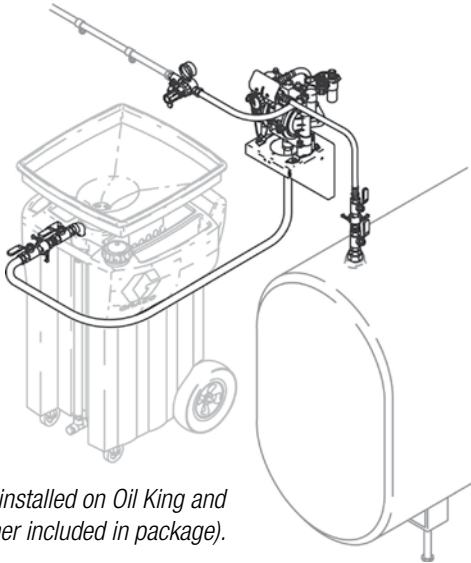


Ordering Information

Wall Mount Packages



Package Number	24E166	25T815	224873
Diaphragm Pump	1050A (1 in) UL-listed	1050A (1 in) UL-listed	716 (3/4 in)
Pump Part Number	647731	647016	241906
Mounting Type	Wall Bracket	Wall Bracket	Wall Bracket
Mounting Part Number	24C637	24C637	224835
Fluid	Oil	Anti-freeze	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	—



Package 224873 installed on Oil King and tank (neither included in package).

Ordering Information

Base Pump Packages

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



Package Number	224955	24E167	223695
Diaphragm Pump	716 (3/4 in)	1050A (1 in)	716 (3/4 in)
Pump Part Number	241906	647731	241906
Mounting Type	Base	Base	Base
Fluid	Gear Lube	Gear Lube	Gear Lube
Evacuation	Suction Wand	Suction Wand	Suction Wand
Evacuation Part Number	221146	221146	223696
Air Control Kit	110149	221147	—
Instruction Manual	308573	313597	308035 / 308573
Listings	CE	UL, CE	—
Notes	Order additional suction hose/wand (221146) and additional control valve (220969) for each additional suction point. Order grounding clamp (222011) or use locally supplied grounding wires and clamps in accordance with applicable codes.	Order additional suction hose/wand 221146 and additional control valve 220969 for each additional suction point. Order grounding clamp 222011 or use locally supplied grounding wires and clamps in accordance with applicable codes. See instruction manual 313597 for more information.	—

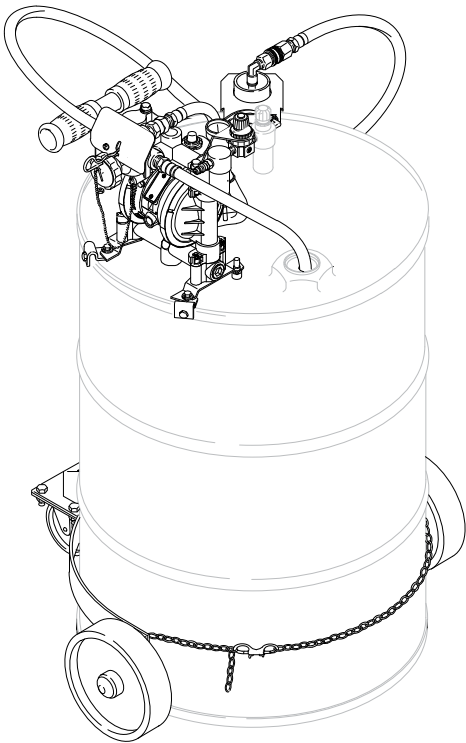


Ordering Information

Fas-Vac Mobile Packages



Package Number	224700	224701
Cart	224665	111470
Compatible Drum Size (Not included)	16 gal (60 l)	55 gal (200 l)
Pump	716 (3/4 in)	716 (3/4 in)
Pump Package	224667	224667
Fluid	Oil, Gear Lube	Oil, Gear Lube
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

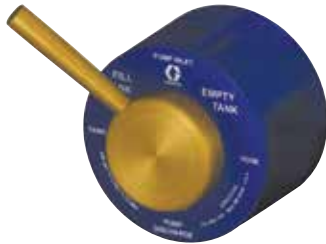


Package 224701 installed on oil drum
(Drum and filter regulator not
included in package)

Ordering Information

4-Way Evacuation Valve

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

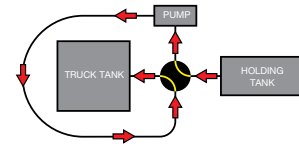


Features and Benefits

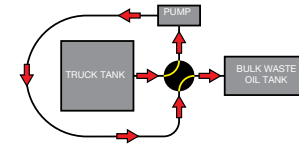
- Simplifies installation by eliminating need for multiple valves
- Unrestricted flow – no pressure or volume loss
- Two-position tank fill and emptying control
- Tapered, self-seating valve spool for superior sealing performance

Part Number	Description
120581	1 in NPT(F) 4-Way Evacuation Valve
120601	1-1/2 in NPT(F) 4-Way Evacuation Valve

Lube Truck/Holding Tank



Lube Truck/Bulk Waste Tank



Air Regulators

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

	Part Number	Description
	110318	1/4 NPT(FBE)
	110147	1/4 NPT(FBE) with gauge
	110234	3/8 NPT(FBE)
	109075	3/8 NPT(FBE) with gauge
	202858	3/8 NPT(M) x 1/2 NPSM(F) with gauge
	104266	1/2 NPT(FBE)
	244844	1/2 NPT(FBE) with gauge
	207755	3/4 NPT(FBE)
	244845	3/4 NPT(FBE) with gauge

Fluid Reclaim Accessories

Ordering Information

Air Filters and Drains

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

	Part Number	Description
	110146	1/4 NPT(FBE) Air Filter. Manual drain.
	106148	3/8 NPT(FBE) Air Filter. Auto-drain.
	106149	1/2 NPT(FBE) Air Filter. Manual drain.
	106150	3/4 NPT(FBE) Air Filter. Manual drain.
	106151	Automatic filter drain float-type, 1/4 NPT(M). Use with 106150, 112859 and 217074.
	127711	Automatic filter drain float-type. Use with 106148 and 106149. Sold in NA only.

Installation Kits

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

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

Accessories Ordering Information

Additional Accessories

	Part Number	Description
	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.
	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.
	224666	36 in suction wand storage kit
	218970	Tandem drain kit connects two rolling receivers for flow-through draining operation. Kit includes connector hose, shut-off valve, pipe nipple and quick-connect nipple. Instruction manual 307727.
	108491	Drain hose kit allows rolling used-oil receiver to be drained directly into the used-oil line. Kit is 24 in (0.6 m) in length with camlock coupler on one end.
	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.
	223888	6 ft (1.8 m) suction hose for ATF and anti-freeze. 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

[illegible]

ACCESSORIES

	Page
Air Regulators and Valves	276
Air Valves	277
Hose Fittings	278
Lubrication Hoses	279
Air/Water Hoses	280
Quick Connect Fittings	281
Adapters and Fittings	282-283



Ordering Information

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).

	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
	208630	1/2 in NPT(M) x 3/8 in NPT(F)	500 psi
	109077	3/4 in NPT(FBE)	600 psi
	118464	1 NPT(FBE)	600 psi

Ordering Information

Air Needle Valve

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

	Part Number	Inlet	Outlet
	205090	1/4 in NPSM(M)	1/4 in NPSM(F)
	206264	1/4 in NPT(M)	1/8 in NPT(F)

Air Pressure Relief Valve

Prevents pump from operating beyond recommended working pressure by opening at a pre-set maximum air pressure.

	Part Number	Maximum Pressure Rating	Thread
	110065	60 psi (4 bar)	1/4 in NPT(M)
	103347	100 psi (6.9 bar)	1/4 in NPT(M)

Air Pressure Gauge

Allows visual check of air pressure being supplied to the pump. Rated to 200 psi (14 bar)

	Part Number	Inlet	Color
	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
	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 due to an empty barrel or hose leak.

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

Ordering Information

Blow Guns

Safety Blow Gun tip swivels freely and cannot be removed. Tip pressure will not exceed 30 psi (2 bar), adequate for cleaning. Maximum working pressure 150 psi (10 bar). Use with coupler 208536.

	Part Number	Description	Inlet
	236211	Air blow gun	1/4 in NPT(F)

Tire Inflators

	Part Number	Description	Includes			
			12 in Hose	Swivel Dual-Foot Chuck	Straight-On Chuck	Pop-Out Gauge
	236205	Heavy-Duty Tire-Inflator	Yes	Yes	—	Yes
	236206	Passenger Car Tire Inflator	Yes	—	Yes	Yes
	218545	Tire Chuck with 1/4 in NPT(F) inlet	—	—	—	—

Water Valve

Water/Anti-Freeze Bib is a durable, full-volume dispense nozzle for water, anti-freeze and windshield washer fluid. Nitrile rubber seals.

	Part Number	Inlet	Pressure Rating
	180685	1/4 in NPT(F)	100 psi (7 bar)

Ordering Information

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 (mm)	Max PSI (bar)	Hose Length	Fitting		Part Number
				End 1 Thread NPT(M)	End 2 Thread NPT(M)	
	1/4 (6.44)	5,000 (345)	12 in (0.3 m)	1/8	1/8	109145
			30 in (0.8 m)			109148
			24 in (0.8 m)	3/8	3/8	109147
			48 in (1.2 m)	1/4	1/4	109149
			72 in (1.8 m)			109150
			12 ft (3.6 m)			109151
			15 ft (4.6 m)			109152
			20 ft (6.1 m)		3/8	109153
			25 ft (7.6 m)		1/4	109154
			35 ft (10.6 m)		3/8	109156
			40 ft (12.2 m)			109157
			50 ft (15.3 m)			109158
	3/8 (9.5)	4,000 (276)	12 in (0.3 m)	1/4	1/2	109160
			24 in (0.62 m)	3/8	3/8	109161
			48 in (1.2 m)			109162
			72 in (1.8 m)			109163
			15 ft (4.6 m)	1/4	1/4	109165
			40 ft (12.2 m)		3/8	109169
			50 ft (15.3 m)			109170
	1/2 (12.7)	3,000 (207)	15 in (0.4 m)	1/2	1/2	110069
			18 in (0.5 m)			220598
			54 in (1.4 m)			220600
			72 in (1.8 m)			220591
			10 ft (3.1 m)			220590
			16 ft (4.9 m)			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
	3/4 (19.1)	2,250 (155)	18 in (0.4 m)	3/4	3/4	109108
			72 in (1.8 m)			109105
			10 ft (3.0 m)			111010
			75 ft (22.9 m)	1/2	1	237865
			50 ft (15.2 m)			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

Ordering Information

Air/Water Hoses

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

	ID Inch (mm)	Max PSI (bar)	Hose Length	Fitting		Part Number
				End 1 Thread NPT(M)	End 2 Thread NPT(M)	
	Fabric-Reinforced 1/4 (6.44)	180 (12.4)	18 in (0.5 m)	1/4	1/4	109123
			4 ft (1.2 m)			109124
			6 ft (1.8 m)			109125
			10 ft (3.1 m)			109126
			25 ft (7.6 m)		1/2	109127
			40 ft (12.2 m)			109128
			40 ft (12.2 m)	3/8	1/4	218491
	3/8 (9.5)	180 (12.4)	18 in (0.5 m)	3/8	3/8	204560
			4 ft (1.2 m)			109130
			6 ft (1.8 m)			203320
			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
	1/2 (12.7)	180 (12.4)	22 in (0.56 m)	1/2	1/2	218093
			4 ft (1.2 m)			110046
			6 ft (1.8 m)			205418
			10 ft (3.1 m)			214656
	1/2 (12.7)	300 (20.7)	25 ft (7.6 m)	1/2	1/2	248312
			50 ft (15.2 m)			248313
	3/4 (19.1)	180 (12.4)	18 in (0.5 m)	3/4	3/4	110047
			4 ft (1.2 m)			110048
			6 ft (1.8 m)			208610
			10 ft (3.1 m)			214955
			25 ft (7.6 m)			208611



» Ordering Information

Quick-Connect Coupler

Permits quick, convenient attachment of air supply hoses.

	Part Number	Inlet	Body Size
	208536	1/4 in NPT(F)	1/4 in
	110198	3/8 in NPT(F)	1/4 in
	110199	1/2 in NPT(F)	3/8 in
	110200	3/4 in NPT(F)	1/2 in

Quick-Connect Nipple

Allows quick attachment of air supply hoses to pump motor.

	Part Number	Inlet	Body Size
	169967	1/4 in NPT(F)	1/4 in
	169970	1/4 in NPT(M)	1/4 in
	169971	3/8 in NPT(M)	1/4 in
	110196	1/2 in NPT(M)	3/8 in
	110197	3/4 in NPT(M)	1/2 in

Ordering Information

Bushings and Pipe Adapters – Reducing, Standard and Expanding

	Outlet	Inlet					
		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

Ordering Information

Square Head Plug

	Part Number	Inlet
	111697	1/4 in NPT
	100040	3/8 in NPT
	100737	1/2 in NPT
	104663	3/4 in NPT

Swivel Adapters*

						
Rigid End	Swivel End	Straight Swivel Adapter (m x f)	Straight Swivel Adapter (f x f)	90° Swivel Adapter (f x f)	90° Swivel Adapter (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	—
1/2 in	1/4 in	—	155653	—	—	—
	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 3000 psi (207 bar) with appropriate tubing wall thickness.

	Description	Inlet	Tube OD	
			5/8 in	7/8 in
	Tube Union Flow 90° Elbow	—	101012	101376
	Straight Tube Union	—	101009	101340
	Male Connector	3/4 in NPT	—	101339
	Straight Female Connector	1/2 in NPT	101008	—
	Tube Tee with Female Branch	5/8 in NPT	101013	—

Standard Graco Warranty

1-Year Warranty Policy

Graco warrants all equipment manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Graco distributor to the original purchaser for use. With the exception of any special, extended or limited warranty published by Graco, Graco will, for a period of twelve (12) months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective.

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

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser, transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which may include the costs of parts, labor and transportation.

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

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

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

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

Graco Vehicle Service Equipment Group Extended Warranty

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

This warranty does not cover, and Graco shall not be liable for, general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser, transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which may include the costs of parts, labor and transportation.

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

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including but not limited to incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within one (1) year post the warranty period.

GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ANY ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO.

These items sold but not manufactured by Graco (such as electric motors, switches, etc.) are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

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

FOR GRACO CANADA CUSTOMERS

The parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

Graco Vehicle Service Equipment Group Extended Warranty (cont.)

		Warranty Period
REELS	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
	SD Series Hose Reels	7 Years
	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
METERS	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
	Wear parts, including but not limited to o-rings, seals and valves	1 Year
	SD Meters and Valves	5 Years
	Electronics	3 Years
	Wear parts, including but not limited to o-rings, seals and valves	1 Year
PUMPS	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
	Mini Fire-Ball 225 and Fire-Ball 300 Oil and Grease Pumps	7 Years
	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

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
15C502	49, 65	24C537	215, 216	24F774	215
15M308	15, 25	24C538	37, 44, 215, 216	24F775	215
15T366	15, 25, 93	24C539	215, 216	24F776	215
15T367	15, 25, 93	24C637	192, 194, 268	24F777	215
15T368	15, 25, 93	24C772	37, 44, 215	24F778	215
15T369	15, 25, 93	24D132	232, 237	24F779	215
15T370	15, 25, 93	24D133	232, 237	24F870	167, 175
15Y478	231	24D147	192	24F878	167
16A674	257	24D205	193	24F901	112, 116, 119, 124, 138
16A684	256	24D590	71	24F902	113, 114, 116, 120, 125, 126, 138
16A686	257	24D591	71	24F903	114, 116, 120, 126, 138
16A688	257	24D592	75	24F904	46, 112, 116
16A707	256	24D593	75	24F905	46, 113, 114, 116
16F769	138	24D594	71	24F906	46, 114, 116
16F781	138	24D595	75	24F910	34, 41, 47
16F784	138	24D596	71	24F914	35, 36, 42, 43, 47
16F878	19, 25, 31, 33, 34, 40, 41, 46	24D597	71	24F915	19, 25, 32, 39, 46, 114, 116
16F885	31, 35, 36, 42, 43, 46	24D598	75	24F918	31, 47, 49
16F886	31, 32, 33, 39, 46	24D599	75	24F920	35, 42, 47
16G760	170	24D600	71	24F930	35, 36, 42, 43, 47
16N883	227	24D601	75	24F931	35, 42, 47
16P999	227	24D602	71	24F932	35, 42, 47
17C270	50	24D603	71	24F935	34, 41, 46
17C907	178, 179	24D604	75	24F947	168
17C908	178, 179	24D605	75	24G576	19, 25, 31, 33, 34, 35, 37, 38
17F878	18	24D606	71	24G579	31, 34
17F885	18	24D607	71	24G582	31, 32, 39
17R220	15, 24, 92	24D608	75	24G585	31, 36
17S659	15, 25, 87, 90, 93, 223, 233, 238, 244, 256	24D989	221	24G588	31, 40, 41, 42, 43, 44, 45
17S660	15, 25, 87, 90, 93, 223, 233, 238, 244, 256	24D990	221	24G591	31, 41
17S661	15, 25, 87, 90, 93, 223, 233, 238, 244, 256	24D991	221	24G594	31
17S662	15, 25, 87, 90, 93, 223, 233, 238, 244, 256	24D992	221	24G597	31
17S663	15, 25, 87, 90, 93, 223, 233, 238, 244, 256	24D993	221	24G600	111, 112
17T207	15, 24, 90, 92	24D994	221	24G603	111, 113
24A217	221, 222, 226	24D995	221	24G606	111, 114
24A218	222	24D996	221	24G636	169
24A219	232	24D997	221	24G738	96, 167, 170
24A220	232	24D998	221	24G745	166, 167, 168
24A221	232	24D999	221	24G862	114
24A222	232	24E001	221	24G865	215
24A224	233	24E002	221	24G866	215
24A934	222, 226	24E006	145	24H193	223, 227
24A935	222, 226	24E007	145	24H292	170
24A936	222, 226	24E008	145	24H293	168, 170
24A937	222, 226	24E009	145	24H420	19, 25, 34, 35, 36, 37, 38, 39, 41, 42, 43, 44, 45, 46, 112, 113, 114, 116
24A938	222, 226	24E010	145	24H422	113, 116
24A939	222, 226	24E011	145	24H606	116
24A940	222, 226	24E166	265, 266, 268	24H655	216
24A941	222, 226	24E167	269	24H656	216
24A942	222, 226	24E283	236, 237	24H657	215, 216
24A943	222, 226	24E284	236, 237	24H658	215, 216
24A944	222, 226	24E285	236, 237, 238	24H659	215, 216
24A945	222	24E780	146	24H660	215, 216
24A946	222	24E781	146	24H661	215, 216
24A947	222	24E782	146	24H662	32, 35, 37, 39, 42, 44, 215, 216
24A948	222	24E823	238	24H663	113, 114, 215, 216
24A949	222	24E824	238	24H666	34, 41, 46
24A950	222, 226, 233	24F205	51	24H669	35, 42, 46
24A951	222, 233	24F206	51	24H689	34
24B624	194	24F524	176	24H695	34
24B632	194	24F529	167, 168, 173	24H702	35
24B634	194	24F531	167	24H704	35
24B639	194	24F532	167, 168, 177	24H726	35
24B768	194	24F679	168, 175	24H728	35
24C100	223	24F737	215	24H751	32
24C245	231	24F738	215	24H753	32
24C246	231	24F739	215	24H775	32
24C247	231	24F740	215	24H777	32
24C248	231	24F741	215	24H799	34
24C249	231	24F742	215	24H800	34
24C250	231	24F743	215	24H801	34
24C251	231	24F755	215	24H802	34
24C252	231	24F756	215	24H836	41
24C253	231	24F757	215	24H842	41
24C254	231	24F758	215	24H858	116
24C255	231	24F759	215	24H859	34, 41, 46
24C256	231	24F760	215	24H862	112, 113, 114, 116
24C443	216	24F761	215	24H865	19, 25, 32, 33, 39, 40, 46, 116
24C444	215, 216	24F773	215		

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
24H868	42	24N691	226	24P489	243
24H870	42	24N814	227	24P490	243
24H892	42	24P164	227	24P491	243
24H894	42	24P313	242	24P492	243
24H915	39	24P315	242	24P493	243
24H916	39	24P316	242	24P494	243
24H917	39	24P317	242	24P495	243
24H918	39	24P318	242	24P496	243
24H940	39	24P319	242	24P497	243
24H941	39	24P320	242	24P498	243
24H942	39	24P322	242	24P499	243
24H943	39	24P323	242	24P623	116
24H964	41	24P324	242	24P880	227
24H965	41	24P325	242	24P881	227
24H966	41	24P326	242	24P914	233
24H967	41	24P327	242	24P984	242
24J030	112	24P328	242	24P985	242
24J036	113	24P329	242	24P986	242
24J042	114	24P330	242	24P987	243
24J048	113	24P331	242	24P988	243
24J054	114	24P332	242	24P989	243
24J060	113	24P333	242	24R060	244, 255
24J066	114	24P334	242	24R061	244, 255
24J487	116	24P335	242	24R072	244, 255
24J495	32, 35, 36, 38, 39, 43, 45	24P336	242	24R074	244
24J501	113, 114, 116	24P337	242	24R076	244
24J733	37	24P338	242	24R077	244
24J734	37	24P339	242	24R102	250, 257
24J735	44	24P340	242	24R103	251, 257
24J736	44	24P341	242	24R106	251, 257
24J776	37	24P342	242	24R108	257
24J777	44	24P343	242	24R110	252, 257
24K285	36, 47	24P344	242	24R111	242, 243, 244, 250, 251, 255
24K777	38	24P345	242	24R112	242, 244, 250, 255
24K796	45	24P346	242	24R114	252, 257
24K797	38	24P347	242	24R115	242, 243, 244, 250, 251, 255
24K798	45	24P348	242	24R117	243, 244, 252, 255
24K799	38	24P349	242	24R118	252
24K800	45	24P350	242	24R350	50, 54, 65, 119, 120, 124, 125, 126, 137, 146
24K834	38	24P351	242	24R404	250
24K835	45	24P352	242	24R405	250
24K836	37	24P353	242	24R406	250
24K837	44	24P354	242	24R407	250
24K838	36	24P355	242	24R408	250
24K839	43	24P356	242	24R409	250
24K842	36	24P455	243	24R410	250
24K843	43	24P456	243	24R412	250
24K860	194	24P457	243	24R413	250
24K901	194	24P458	243	24R414	250
24K932	194	24P459	243	24R415	250
24K937	194	24P460	243	24R416	250
24M499	168	24P461	243	24R419	250
24N323	232	24P462	243	24R420	250
24N324	232	24P463	243	24R421	250
24N325	232	24P464	243	24R422	250
24N326	232	24P465	243	24R423	250
24N327	232	24P466	243	24R424	250
24N328	232	24P467	243	24R425	250
24N331	233	24P468	243	24R426	250
24N332	233	24P469	243	24R427	250
24N333	233	24P470	243	24R428	250
24N334	233	24P471	243	24R429	250
24N335	233	24P472	243	24R430	250
24N336	233	24P473	243	24R431	250
24N337	233	24P474	243	24R432	250
24N339	233	24P475	243	24R433	250
24N340	233	24P476	243	24R434	250
24N341	233	24P477	243	24R435	250
24N342	233	24P478	243	24R436	250
24N343	233	24P479	243	24R437	251
24N444	223, 227	24P480	243	24R438	251
24N674	226	24P481	243	24R439	251
24N675	226	24P482	243	24R440	251
24N682	226	24P483	243	24R441	251
24N683	226	24P484	243	24R442	251
24N684	226	24P485	243	24R443	251
24N685	226	24P486	243	24R444	251
24N686	227	24P487	243	24R445	251
24N690	226	24P488	243	24R446	251

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
24R447	251	24R563	252	24T333	255
24R448	251	24R564	252	24T334	255
24R449	251	24R565	252	24T335	255
24R450	251	24R566	252	24T336	255
24R451	251	24R567	252	24T337	255
24R452	251	24R568	252	24T875	254
24R453	251	24R569	252	24T876	254
24R454	251	24R570	252	24T886	253
24R455	251	24R571	252	24T888	253
24R456	251	24R572	252	24T889	253
24R457	251	24R573	252	24T891	253
24R458	251	24R574	252	24T892	253
24R459	251	24R575	252	24T910	253
24R460	251	24R576	252	24T911	253
24R461	251	24R577	252	24U227	201
24R462	251	24R578	252	24U228	201
24R463	251	24R854	242	24U947	98
24R464	251	24R855	242	24U950	98
24R465	251	24R856	242	24U953	98
24R466	251	24R857	242	24U956	98
24R503	252	24R859	242	24U959	98
24R504	252	24R860	242	24V034	51, 98
24R505	252	24R861	242	24V037	98
24R506	252	24R862	242	24V040	98
24R507	252	24R863	242	24V043	98
24R508	252	24T011	252	24V046	98
24R509	252	24T012	252	24V049	98
24R510	252	24T013	252	24V052	99
24R511	252	24T014	252	24V055	99
24R512	252	24T015	252	24V058	99
24R513	252	24T016	252	24V641	165
24R515	252	24T017	252	24V644	165
24R516	252	24T018	252	24V645	165
24R517	252	24T019	252	24V646	165
24R518	252	24T020	252	24V656	165
24R519	251	24T021	252	24V677	167
24R520	251	24T022	252	24V678	167
24R521	251	24T023	252	24V686	168
24R522	251	24T024	252	24W140	179
24R523	251	24T025	252	24W141	179
24R524	251	24T104	253	24W142	179
24R525	251	24T105	253	24W143	179
24R526	251	24T106	253	24W144	179
24R527	251	24T107	253	24W145	179
24R528	251	24T108	253	24W148	168, 175
24R529	251	24T109	253	24W149	167, 175
24R530	251	24T110	253	24W154	168, 175
24R531	251	24T111	253	24W161	165, 167, 175
24R532	251	24T112	253	24W185	168
24R533	251	24T113	253	24W186	167
24R534	251	24T114	253	24W190	175
24R535	251	24T115	253	24W250	174, 236, 238
24R536	251	24T116	253	24W251	174, 238
24R537	251	24T117	253	24W306	99
24R538	251	24T118	253	24W337	141
24R539	251	24T119	253	24W498	141
24R540	251	24T120	253	24W515	201
24R541	251	24T121	253	24W641	99
24R542	251	24T122	253	24Y859	225
24R543	251	24T123	253	24Y861	225
24R544	251	24T124	253	24Y862	225
24R545	251	24T125	253	24Y863	225
24R546	251	24T126	253	24Y864	225
24R547	251	24T127	253	24Y869	225
24R548	251	24T128	253	24Y870	225
24R549	252	24T129	253	24Y871	225
24R550	252	24T130	253	24Y872	225
24R551	252	24T131	253	24Y880	225
24R552	252	24T132	253	24Y882	225
24R553	252	24T133	253	24Y883	225
24R554	252	24T252	251, 257	24Y886	225
24R555	252	24T253	252, 257	24Y887	225
24R556	252	24T254	252, 257	24Z125	99
24R557	252	24T327	255	24Z126	99
24R558	252	24T328	255	24Z127	99
24R559	252	24T329	255	24Z128	99
24R560	252	24T330	255	24Z129	99
24R561	252	24T331	255	24Z130	99
24R562	252	24T332	255	24Z131	99

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
24Z132	99	26C123	256	104815	204
24Z133	99	26C124	256	105281	283
24Z257	19, 25	26C169	112	105474	26
24Z676	17	26C170	113	106148	55, 63, 112, 113, 114, 193, 272
24Z677	17	26C171	114	106149	63, 193, 201, 205, 272
24Z728	17, 19	26C172	164	106150	193, 201, 272
24Z978	12, 19	26C173	164	106151	272
25A857	194	26C174	164	107141	276
25A874	194	26C175	164	107142	201, 276
25C548	113	26C183	125	108190	191
25C549	112	26C184	125, 136, 154	108202	273
25C550	33	26C185	125	108203	273
25C551	33	26C186	125	108458	26, 63, 65, 96
25C552	33	26C267	15, 24, 90	108491	273
25C553	33	26C268	15, 24, 90	108537	59, 63, 65
25C554	40	26C354	24, 92	108867	273
25C555	40	26C355	24, 92	109067	136
25C556	40	26C356	24, 92	109075	50, 51, 54, 55, 56, 63, 119, 120, 124, 125, 126, 127, 128, 132, 133, 136, 271
25C557	40	26C357	24, 92	109077	276
25C841	95	26C358	24, 92	109105	66, 67, 192, 204, 279
25C903	32, 33, 35, 37, 51, 89	26C360	24, 92	109108	66, 204, 279
25C904	32, 37, 39, 45, 89	26C361	24, 92	109123	204, 280
25C905	89	26C384	24, 55, 92	109124	280
25C915	89	26C385	24, 92	109125	62, 191, 192, 204, 280
25C916	89	26C399	25	109126	280
25C918	89	26C401	22	109127	280
25C919	89	26C409	25	109128	280
25D116	141	100030	282	109130	280
25D121	19, 25	100040	283	109131	280
25D130	19, 25	100054	158, 159	109132	280
25D433	89	100081	282	109134	280
25D436	89	100206	126, 282	109135	280
25D437	89	100220	64	109145	136, 154, 156, 157, 279
25D625	19	100380	282	109147	279
25D906	15, 25	100385	282	109148	139, 154, 157, 279
25D934	90	100451	282	109149	279
25D936	90	100474	282	109150	120, 126, 127, 128, 136, 279
25M317	15, 19, 25	100505	282	109151	119, 120, 124, 125, 136, 279
25M318	15	100615	282	109152	279
25M319	15, 19, 25	100737	283	109153	279
25M320	15	100833	158, 159	109154	125, 279
25M323	15	100834	158	109156	279
25M324	15	100835	158	109157	279
25M326	15, 19, 25	100837	159	109158	257, 279
25M328	15	100840	282	109160	279
25M329	15	100846	158, 159	109161	279
25M330	15	100847	158, 159	109162	279
25M404	55, 92, 221	100848	158	109163	68, 131, 132, 133, 134, 135, 136, 279
25M405	92	100854	159	109165	123, 136, 279
25M406	92, 221	100896	90, 282	109167	123
25M407	92	100960	59, 60, 63, 123, 131, 132, 133, 197, 277	109169	279
25M410	92	100961	63	109170	279
25M411	92	100962	63	110025	26
25M413	50, 54, 92	100970	158, 159	110046	280
25M415	92	100971	158	110047	280
25M416	92	101008	283	110048	71, 75, 280
25M417	92	101009	283	110065	277
25M449	16, 19	101012	283	110069	279
25N415	19	101013	283	110127	68
25P544	141	101078	63, 66	110146	63, 191, 193, 272
25R975	13	101180	277	110147	63, 167, 168, 192, 193, 271
25R976	13	101277	158	110148	63
25R977	13	101281	158	110149	63, 269, 270, 276
25R978	13	101283	158	110150	63, 276
25R979	13	101287	159	110196	193, 281
25R980	13	101297	159	110197	193, 281
25R981	13	101312	159	110198	123, 136, 281
25T815	268	101339	283	110199	193, 281
26A140	242	101340	283	110200	193, 281
26A141	242	101376	283	110201	156
26A142	242	101496	67, 204	110202	156
26A143	243	101604	159	110203	156
26A144	243	101605	159	110216	156
26C061	264	102527	68	110218	156
26C062	264	103347	277	110223	63, 64, 136, 167, 168, 192, 193, 276
26C063	264	103538	201	110224	63, 64, 128, 136, 193, 276
26C064	264	104266	59, 60, 63, 131, 133, 271	110225	59, 63, 64, 135, 136, 192, 193, 276
26C121	256	104655	204	110226	64, 136, 193, 276
26C122	256	104663	283		

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
110234.....	123, 136, 197, 271	126380.....	252, 257	155677.....	283
110236.....	104	126503.....	250, 256	155699.....	282
110237.....	104	126504.....	251, 256	155836.....	157
110285.....	104	126505.....	251, 256	155865.....	283
110314.....	65	126688.....	252, 257	156022.....	282
110318.....	191, 271	127167.....	252, 257	156172.....	283
110319.....	277	127173.....	252, 257	156173.....	283
110326.....	280	127214.....	254	156296.....	282
110702.....	158	127217.....	254	156580.....	282
110703.....	159	127218.....	254	156589.....	283
110705.....	159	127219.....	254	156684.....	46, 283
110706.....	159	127220.....	254	156789.....	265
110709.....	159	127221.....	254	156823.....	116, 283
110710.....	159	127222.....	254	156849.....	55, 123, 136, 282
110711.....	159	127223.....	254	156859.....	131, 132
110712.....	159	127224.....	254	156971.....	126, 282
110713.....	159	127225.....	254	157191.....	282
110877.....	66	127271.....	254	157416.....	55, 283
110878.....	66	127634.....	178, 179	157676.....	283
110906.....	66	127635.....	178, 179	157705.....	46, 112, 113, 114, 283
110907.....	66	127637.....	178, 179	157785.....	283
111010.....	279	127639.....	178, 179	158256.....	283
111470.....	64, 139, 270	127640.....	178	158383.....	283
111620.....	26	127642.....	163, 164, 165	158491.....	282
111697.....	283	127643.....	163, 164, 165	158555.....	282
112119.....	194	127646.....	175	158581.....	282
112174.....	68	127647.....	169	158586.....	282
112196.....	156	127649.....	165, 167, 168, 172	158683.....	282
112197.....	151	127650.....	172	158990.....	277
112198.....	151	127651.....	172	159153.....	283
112255.....	156, 157	127652.....	172	159239.....	282
112859.....	272	127654.....	172	159801.....	283
113053.....	68	127655.....	164, 173	159840.....	282
113093.....	282	127656.....	164, 165, 176	159841.....	282
113497.....	194	127657.....	176	159842.....	221, 282
113859.....	26	127663.....	165, 167, 168, 171	160022.....	46, 283
114017.....	87	127679.....	164	160327.....	66, 204, 283
114558.....	119, 120, 124, 125, 136, 204	127680.....	164	160754.....	65, 77, 79, 137, 141
114829.....	81	127711.....	55, 272	161037.....	283
115042.....	71, 75, 145, 146, 192	127720.....	176	161077.....	283
116229.....	273	127793.....	178, 179	161889.....	283
116306.....	167, 168, 176	127794.....	178, 179	162024.....	282
118464.....	276	127795.....	178, 179	162449.....	282
119577.....	262	127796.....	178, 179	162505.....	283
120581.....	271	127800.....	171	165198.....	113, 282
120601.....	271	127804.....	176	168595.....	282
124398.....	173	127805.....	176	169967.....	281
124461.....	257	127806.....	176	169969.....	204
124470.....	257	127815.....	176	169970.....	113, 193, 281
124541.....	175	127823.....	176	169971.....	119, 120, 123, 124, 125, 136, 281
124548.....	177	127873.....	164	171818.....	68
124549.....	177	127875.....	169	172405.....	64
124550.....	177	129581.....	112, 113, 114, 115	175013.....	282
124581.....	167, 174, 175, 238	129591.....	112, 113, 114, 115	176393.....	282
124603.....	167, 175	129645.....	33, 40, 46, 116, 139	176684.....	64
124671.....	168, 175	129876.....	90	180199.....	66
124875.....	168, 174, 175, 238	130783.....	25	180685.....	221, 278
124963.....	167, 168, 176	131183.....	46, 112, 116, 139	180698.....	233, 238, 244, 255
124964.....	170	131184.....	33, 40, 46, 113, 116, 139	183241.....	138
124965.....	170	131226.....	15, 25, 93	183243.....	138
125014.....	177	131380.....	141	186463.....	138
125074.....	175	131394.....	141	186472.....	26
125078.....	165, 168, 173	131462.....	15	187359.....	270, 273
125079.....	168, 175	131733.....	24, 90, 92, 99	187754.....	64
125242.....	175, 257	150171.....	282	188845.....	67, 204
125478.....	169	150286.....	282	190125.....	191
125479.....	169	150287.....	221, 282	191075.....	64, 68
126075.....	257	150622.....	157	191126.....	68
126076.....	257	151519.....	282	191128.....	68
126359.....	250, 256	154616.....	265	191130.....	68
126360.....	250, 256	155332.....	15, 25	191131.....	68
126361.....	250, 256	155470.....	66, 131, 132, 133, 134, 135, 136, 283	191287.....	87
126362.....	250, 256	155494.....	64, 66, 68, 120, 126, 127, 128, 131, 132, 133, 134, 135, 136, 283	191288.....	87
126363.....	251, 256	155495.....	283	191289.....	87
126364.....	251, 256	155541.....	120, 126, 127, 128, 136, 204, 283	191294.....	87
126375.....	250	155570.....	199, 283	191295.....	87
126376.....	250, 256	155653.....	283	194048.....	282
126377.....	250, 256	155665.....	283	194347.....	193
126379.....	250, 257			196220.....	131, 132

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
196471	104	205582	158	220598	55, 66, 279
200020	158	205592	158	220600	279
200021	158	205626	58, 59	220608	279
200325	154, 157, 158	205699	131, 132	220653	119, 124, 138
200326	50, 54, 59, 65, 77, 79, 120, 123, 126, 131, 132, 137, 141, 146, 148, 197, 205	206197	201	220654	119, 125, 127, 138
200389	139, 153, 154, 155, 157, 158	206199	193	220969	269
201881	158	206264	277	221007	273
202577	119, 120, 123, 124, 125, 136, 139, 154, 199	206405	122, 123, 197	221092	279
202579	155, 157	206496	199	221093	279
202600	155	206502	199	221146	269, 273
202650	158	206655	56	221147	269
202654	159	206656	60	222011	193, 201, 269, 273
202858	193, 271	206699	122, 123, 197	222051	62
202869	138	206700	122, 123, 197	222058	65, 77, 79, 123, 197
202965	283	207361	56, 60, 127, 133, 148	222059	119, 124, 137
203156	64	207366	127, 133, 148	222060	56, 125, 127, 133, 148
203198	157	207367	56, 60	222061	56, 125, 127, 133, 148
203320	66, 120, 126, 127, 128, 136, 280	207561	65, 137	222062	50, 51, 63, 66
203497	157, 158	207562	65, 137	222063	50, 54, 55, 56, 63, 66
203504	157, 158	207579	68	222065	58, 59, 60
203521	222, 226	207651	193	222066	59, 60, 63, 66
203522	222, 226	207755	201, 271	222067	60
203523	222, 226	207946	157	222068	59, 63, 66
203524	222, 226	207947	157	222069	124
203525	222, 226	207948	157	222070	124, 125, 136
203526	222, 226	208009	265	222071	127
203597	157	208390	276	222072	120, 126, 127, 128, 136
203622	50, 54, 67, 80, 120, 125, 139	208393	276	222073	126, 127
203650	64, 80, 119, 120, 124, 125, 139	208434	283	222074	126
203664	124	208536	193, 278, 281	222075	133
203688	50, 54, 59, 63, 67	208610	145, 146, 280	222076	131, 132, 133, 134, 135, 136
203697	151, 156	208611	280	222077	197
203701	151	208630	276	222078	123
203702	151	210880	64	222079	197
203703	151	210881	204	222080	123, 136
203857	53, 54, 56, 58	214570	199	222081	123, 136
203872	53, 54, 56, 58	214583	204	222082	197
203876	53, 54, 55	214656	280	222086	56
203976	124, 125	214658	80	222087	53, 54, 58
203987	63, 68, 77	214847	63	222095	58, 59, 60
203992	64	214848	63, 201, 205	222103	62
204072	157	214849	201	222104	62
204076	67	214926	157	222118	63, 204
204082	157	214955	280	222119	63, 204
204083	157	215407	26	222225	222, 232, 237
204084	157	215474	26	222243	64, 125, 139
204095	56, 60	215475	26	222245	125
204121	126	215481	26	222308	51, 54, 55, 62, 63, 64, 130
204130	138	215487	26	222383	125, 136
204134	119, 124	217072	59, 63, 276	222602	62
204144	67, 197	217073	276	222629	104
204204	157	217074	272	222645	104
204254	53, 54, 56, 58	217359	204	222902	150
204264	56	217430	283	222916	193
204351	124	218093	66, 280	223107	133
204353	126	218115	62	223108	131
204385	65, 131, 132, 137	218316	62, 204, 272	223179	26, 96
204461	126, 131, 132	218334	201	223187	158
204467	126	218340	222, 232, 237	223344	131, 132, 133, 138
204560	66, 280	218341	222, 232, 237	223448	104
204574	77, 79, 80, 123, 125, 131, 132, 137, 141, 146, 148, 197, 205	218491	280	223695	269, 273
204741	222, 226, 232	218545	221, 278	223696	269, 273
204867	80	218549	37, 44, 51, 55, 219, 220, 221, 222, 230, 231, 232, 236, 237, 238	223700	138, 141, 148
204897	157	218550	219, 220, 222, 230, 231, 232	223701	138, 141, 148
204929	158	218588	26	223845	127, 138
205054	67	218742	71	223846	131, 132, 133, 138
205090	277	218903	66	223888	191, 273
205102	131	218969	266, 273	224022	198
205337	138	218970	273	224023	198
205339	126, 131, 132	220107	105	224040	67, 277
205394	130, 131, 133	220112	105	224266	134
205395	130, 131, 133, 134, 135	220170	123	224417	222, 232
205418	66, 131, 132, 133, 134, 135, 136, 192, 280	220171	123	224444	233, 238
205528	126, 131, 132	220590	279	224458	199
205532	158	220591	64, 66, 279	224459	199
205554	158	220592	279	224469	199
205568	158	220593	279	224512	50, 54, 272
		220596	191	224534	55
				224541	55

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
224579.....	56, 60, 67	236763.....	26	240685.....	268
224665.....	270	236764.....	26	240718.....	65
224666.....	270, 273	236778.....	68, 77, 79	240832.....	265, 266, 268
224667.....	270	236864.....	77, 79, 148, 150	241056.....	60
224700.....	270	237075.....	50, 54, 64	241057.....	60
224701.....	270	237129.....	203	241246.....	138
224702.....	270, 273	237130.....	203	241633.....	55
224741.....	76, 77	237131.....	203	241657.....	194
224742.....	76, 77	237132.....	203	241663.....	65, 137
224751.....	147, 148	237133.....	203	241906.....	182, 187, 192, 194, 267, 268, 269
224752.....	147, 148	237134.....	203	241908.....	279
224759.....	270	237161.....	191	242055.....	139, 154
224762.....	273	237211.....	193	242056.....	119, 120, 123, 124, 125, 136, 139, 154
224825.....	198	237526.....	58, 59	242057.....	139, 154
224826.....	198	237601.....	63, 68	242058.....	139, 154
224835.....	191, 192, 194, 268	237653.....	76, 77	243161.....	199
224872.....	139, 154	237861.....	279	243650.....	265
224873.....	260, 261, 265, 266, 268	237865.....	279	243669.....	182, 186, 192, 194
224912.....	147, 148	237866.....	279	243817.....	133
224915.....	148	237872.....	222, 232, 237	243835.....	87
224916.....	148	237873.....	232, 237, 244, 255	243836.....	87
224955.....	269	237874.....	232, 237, 244, 255	243837.....	87
225006.....	125	237893.....	26, 55, 63, 68	244038.....	55
225014.....	126	237904.....	77	244055.....	266
225016.....	126	237932.....	244	244342.....	26
225026.....	125	238108.....	58, 59	244628.....	59
225094.....	54	238125.....	64	244635.....	132, 135
225272.....	265	238245.....	59, 63, 68	244636.....	132, 135
225376.....	80	238246.....	63, 66	244637.....	132
225378.....	80	238247.....	66	244644.....	128
225380.....	80	238370.....	64, 68	244645.....	128
225384.....	80	238371.....	86	244657.....	145, 146
225640.....	54	238428.....	192, 194	244679.....	192
225642.....	54	238429.....	65	244680.....	192
225728.....	54	238431.....	65	244681.....	192
225773.....	124	238432.....	65	244682.....	192
225781.....	131	238433.....	65	244844.....	134, 135, 136, 192, 271
225782.....	59	238434.....	65	244845.....	271
225786.....	59	238436.....	199	244846.....	59
225827.....	124	238438.....	199	244847.....	59
225844.....	151	238440.....	199	244905.....	134
225852.....	54	238592.....	68	244906.....	134, 135
225853.....	59	238593.....	68	245694.....	124
225880.....	80	238595.....	68	245695.....	124
225914.....	151	238596.....	68	245696.....	125
225931.....	54	238866.....	260, 265	245697.....	125
226012.....	124	238887.....	86	246775.....	49, 50, 51
226013.....	126	238899.....	194	246780.....	118, 120
226018.....	131	238909.....	193	246781.....	118, 120
226269.....	197	238996.....	26	246903.....	50
226289.....	81	239019.....	26	246904.....	50
226290.....	81	239301.....	265	246906.....	50
226342.....	197	239302.....	265	246907.....	50
226940.....	203	239663.....	199	246909.....	118, 119
226941.....	203	239702.....	62	246910.....	119
226942.....	203	239703.....	62	246911.....	119
226943.....	203	239705.....	80	246913.....	119
226944.....	203	239706.....	105	246914.....	120
226945.....	203	239707.....	80	246916.....	120
226947.....	203	239729.....	130, 132, 133	246917.....	120
226948.....	203	239730.....	130, 132, 133, 134, 135	246946.....	193
226951.....	203	239731.....	130	247335.....	134
226952.....	203	239824.....	94	247337.....	134
226953.....	203	239829.....	86	247355.....	134
233807.....	124, 125, 153	239876.....	94	247443.....	147, 148
233933.....	153	239877.....	122, 124	247450.....	147, 148, 149
234237.....	197, 199	239887.....	122, 125, 126, 127, 128	247453.....	96
235346.....	266	239888.....	122, 126, 127, 128	247540.....	147
235457.....	198	239949.....	86	247712.....	101
235998.....	63, 68	239950.....	86	247713.....	101
236054.....	63, 67, 192, 193, 204	239951.....	86	247714.....	101
236058.....	119, 120, 136	239952.....	194	247717.....	101
236171.....	158	239965.....	136	247718.....	103
236205.....	278	239966.....	136, 199	247721.....	103
236206.....	278	240416.....	87	247722.....	103
236211.....	278	240417.....	26, 63, 65	247723.....	103
236273.....	194	240429.....	63, 68	247724.....	103
236753.....	76, 77	240453.....	87	247725.....	103
236754.....	78, 79	240684.....	268	247759.....	87

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
247760.....	87	260145.....	209	HPM6D#.....	220
247888.....	71	260238.....	209	HPM6H#.....	219
247889.....	71	260300.....	209	HPM33#.....	219
247890.....	75	260306.....	209	HPM33B.....	38, 45, 51, 55, 221
247891.....	75	260406.....	210	HPM65#.....	219
247892.....	71	260407.....	210	HPM65B.....	36, 37, 38, 43, 44, 45, 51, 55
247893.....	71	286211.....	198	HSDD5#.....	236
247894.....	75	286517.....	197, 199	HSDD5A.....	174
247895.....	75	286621.....	198	HSDD5B.....	174
247969.....	71	512874.....	128, 135, 137	HSDD5F.....	174
247973.....	145	514150.....	26	HSDDD#.....	236
247974.....	145	647016.....	182, 184, 192, 194, 268	HSDDDA.....	174
247975.....	145	647648.....	182, 184, 194	HSDDDB.....	174
247976.....	145	647731.....	182, 184, 194, 267, 268, 269	HSDDDF.....	174
247977.....	145	652002.....	182, 190, 194	HS1D#.....	230
247978.....	145	948392.....	135, 137	HS15#.....	230
247979.....	146	948393.....	128, 137	HS15#.....	230
247980.....	146	965124.....	130	HS15#.....	230
247981.....	146	965129.....	130	HS15#.....	230
248097.....	49, 50, 51	CM155N.....	146	HSB7#.....	236
248230.....	50	CM17BN.....	146	HSB7#.....	236
248296.....	68	CM2L5N.....	146	HSB7#.....	236
248312.....	280	CM2RBN.....	146	HSB7#.....	236
248313.....	280	CM515N.....	146	HSB7#.....	236
248324.....	68	CM53BN.....	146	HSB7#.....	236
248622.....	51	DOB005.....	194	HSB7#.....	236
248623.....	51	DOB020.....	194	HSB7#.....	236
248632.....	261, 265	DOB500.....	194	HSB7#.....	236
249058.....	279	DOB525.....	194	HSB7#.....	236
249440.....	19, 104	DOF005.....	194	HSB7#.....	236
249615.....	120	DOF020.....	194	HSB7#.....	236
253848.....	256	DOF500.....	194	HSB7#.....	236
253849.....	256	DOF525.....	194	HSB7#.....	236
253850.....	256	DO3005.....	194	HSB7#.....	236
253852.....	256	DO3050.....	194	HSB7#.....	236
253853.....	256	DO3200.....	194	HSB7#.....	236
255143.....	71, 75	DO3255.....	194	HSB7#.....	236
255277.....	32, 34, 39, 41, 86	DO5007.....	194	HSB7#.....	236
255349.....	64	DO5070.....	194	HSB7#.....	236
255461.....	15, 101	DO5200.....	194	HSB7#.....	236
255470.....	15, 24, 90, 92, 101	DO5277.....	194	HSB7#.....	236
255793.....	90, 103	D31255.....	182, 185, 191, 194	HSB7#.....	236
255852.....	15, 24, 92, 98, 99	DB3525.....	182, 188, 194	HSB7#.....	236
255853.....	15, 24, 92, 98, 99	DF3525.....	182, 189, 194	HSB7#.....	236
255854.....	15, 24, 90, 92, 98, 99	HNH55#.....	231	HSB7#.....	236
255855.....	90, 99	HNHB7#.....	237	HSB7#.....	236
255856.....	90	HNHC5#.....	237	HSB7#.....	236
255857.....	15, 24, 92, 101	HNHCD#.....	237	HSB7#.....	236
255858.....	15, 24, 92, 101	HNHFF#.....	237	HSB7#.....	236
255859.....	103	HNL56#.....	231	HSB7#.....	236
255885.....	93	HNL65#.....	231	HSB7#.....	236
255921.....	103	HNLC8#.....	237	HSB7#.....	236
256164.....	99, 101	HNLD5#.....	237	HSB7#.....	236
256215.....	34, 38, 39, 40, 41, 42, 44, 45, 51	HNLE3#.....	237	HSB7#.....	236
256216.....	32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 86	HNME5#.....	231	HSB7#.....	236
256719.....	19, 25	HNMC8#.....	237	HSB7#.....	236
257350.....	87	HNMD5#.....	237	HSB7#.....	236
257351.....	87	HNMD5#.....	237	HSB7#.....	236
257435.....	134	HNMD5#.....	237	HSB7#.....	236
257539.....	19	HNMD5#.....	237	HSB7#.....	236
258693.....	36, 41, 43, 44	HNMD5#.....	237	HSB7#.....	236
258694.....	86	HNMD5#.....	237	HSB7#.....	236
260061.....	208	HNMD5#.....	237	HSB7#.....	236
260100.....	206, 207	HNMD5#.....	237	HSB7#.....	236
260101.....	206, 207	HNMD5#.....	237	HSB7#.....	236
260102.....	206, 207	HNMD5#.....	237	HSB7#.....	236
260104.....	206, 207	HNMD5#.....	237	HSB7#.....	236
260105.....	207	HNMD5#.....	237	HSB7#.....	236
260106.....	207	HNMD5#.....	237	HSB7#.....	236
260108.....	207	HNMD5#.....	237	HSB7#.....	236
260109.....	207	HNMD5#.....	237	HSB7#.....	236
260110.....	208	HNMD5#.....	237	HSB7#.....	236
260111.....	208	HNMD5#.....	237	HSB7#.....	236
260112.....	208	HNMD5#.....	237	HSB7#.....	236
260113.....	208	HNMD5#.....	237	HSB7#.....	236
260114.....	208	HNMD5#.....	237	HSB7#.....	236
260124.....	209	HNMD5#.....	237	HSB7#.....	236
260125.....	209	HNMD5#.....	237	HSB7#.....	236
		HPM3B#.....	220		

AMERICAS

MINNESOTA

Worldwide Headquarters
Graco Inc.
88-11th Avenue N.E.
Minneapolis, MN 55413

MAILING ADDRESS

P.O. Box 1441
Minneapolis, MN 55440-1441
Tel: 800-275-5574 Fax: 612-623-6777

EUROPE

BELGIUM

Graco BVBA
Industrieterrein-Oude Bunders
Slakweidestraat 31
B-3630 Maasmechelen,
Belgium
Tel: 32 89 770 700 Fax: 32 89 770 777

ASIA PACIFIC

AUSTRALIA

Graco Australia Pty Ltd.
Suite 17, 2 Enterprise Drive
Bundoora, Victoria 3083
Australia
Tel: 61 3 9468 8500 Fax: 61 3 9468 8599

CHINA

Graco Fluid Equipment (Shanghai) Co., Ltd.
Building 7, No.1-2
Wenshui Road 299,
Jing'an District
Shanghai 200436
P.R.China
Tel: 86 21 649 50088 Fax: 86 21 649 50077

INDIA

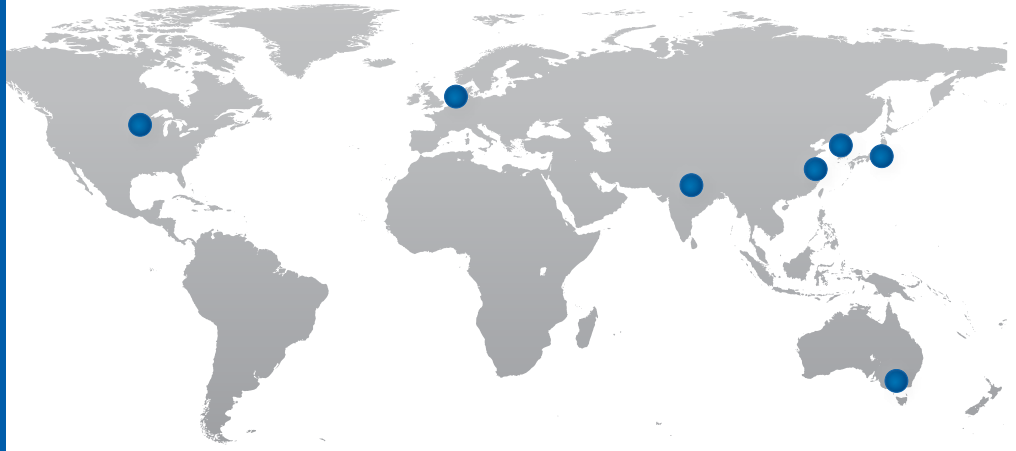
Graco Hong Kong Ltd.
India Liaison Office
Room 443, Level 4
Augusta Point, Golf Course Road
Gurgaon, Haryana, India 122001
Tel: 91 124 435 4208 Fax: 91 124 435 4001

JAPAN

Graco K.K.
1-27-12 Hayabuchi
Tsuzuki-ku
Yokohama City, Japan 2240025
Tel: 81 45 593 7300 Fax: 81 45 593 7301

KOREA

Graco Korea Inc.
Shinhan Bank Building
4th Floor #1599
Gwanyang-Dong, Dongan-Ku,
Anyang-si, Korea 431-060
Tel: 82 31 476 9400 Fax: 82 31 476 9801



Graco's got you covered

Facilities Worldwide for Global Support



Quality First

At Graco, we pride ourselves on providing best-in-class products. Engineered solutions are manufactured in our own facilities, with the highest standards in the industry. We provide you with world-class customer support and expertise to help solve your lubrication challenges.



Global Reach

Graco has facilities across the globe to provide you with the products and service *you* need, where *you* live. Plus, Graco has dedicated field experts in all areas of the world to support the products we sell.



Product Capabilities

Graco has a broad range of products to provide solutions that meet your needs. Our products are engineered and tested to perform in the harshest environments so you can be certain your equipment is protected and working at peak performance.

©2021 Graco Inc. 303245 Rev. AI 2/21 All other brand names or marks are used for identification purposes and are trademarks of their respective owners. All written and visual data contained in this document are based on the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice. For more information on Graco's intellectual property, see www.graco.com/patent or www.graco.com/trademarks.

Contact us today!

Call **800-533-9655** to speak with a Graco representative,
or visit **www.graco.com** for more information.

