# **Service and Maintenance Lubrication Equipment (PMG)**



**Petroleum Handling Equipment for Industrial and Commercial Applications** 





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## **About Graco**

and materials.

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



## **Lubrication Equipment Division**

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

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



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

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

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

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

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

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

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

Graco's marketing specialists investigate ways to expand the market and develop the right technologies for any application, in close cooperation with distributors and field users. We offer tailor-made promotional and communication support, from defining strategic requirements to developing marketing campaigns, organizing events and creating digital or printed material.



## **Did You Know?**

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



## **Graco Resources**

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



#### Graco Sales Book

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

Download today by visiting Salesbook.graco.com



#### **Graco University**

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

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

Learn more today at training.graco.com



#### Graco Gear

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

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

Start shopping today at gracogear.com





## **FLUID MANAGEMENT SYSTEMS**

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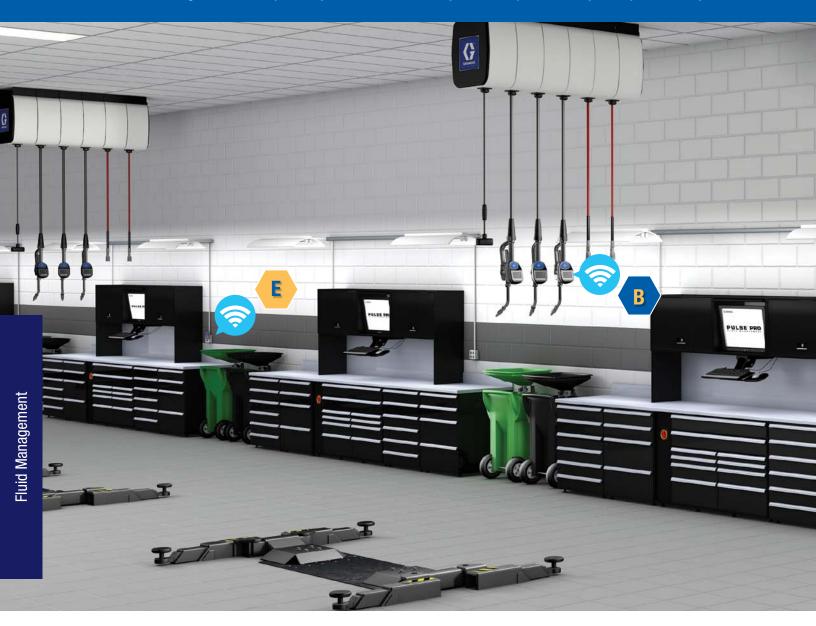


## **Choosing a Graco Fluid Management Solution**

| FEATURE   | Traditional Box               | Pulse FC                  | Pulse Pro  |
|---|-------------------------------|---------------------------|------------|
| Control. Regulate the amount of fluid that's dispens    | sed to reduce spillage and w  | aste.                     |            |
| Allow control of dispenses                              | <b>✓</b>                      | <b>✓</b>                  | <b>✓</b>   |
| Restrict the quantity of fluid                          | <b>✓</b>                      | <b>✓</b>                  | <b>✓</b>   |
| Ensure correct amount of fluid                          | <b>✓</b>                      | <b>~</b>                  | <b>✓</b>   |
| Meters. Put control into the hands of your technicia    | ans so they can be more pro   | ductive, accurate and ac  | countable. |
| Works with petroleum, synthetic based oils, anti-freeze | <b>✓</b>                      | <b>✓</b>                  | ~          |
| Works with windshield wash solvent                      | <b>✓</b>                      |                           | <b>✓</b>   |
| Meter displays quantity dispensed                       |                               | <b>✓</b>                  | <b>✓</b>   |
| Fluid measured at dispense point (highly accurate)      |                               | <b>✓</b>                  | <b>✓</b>   |
| Installation. Seamless integration simplifies disper    | nses without compromising v   | workflows or productivity | •          |
| Works with oil bar                                      | <b>✓</b>                      | <b>✓</b>                  | <b>✓</b>   |
| Wire-free installation                                  |                               | <b>✓</b>                  | <b>✓</b>   |
| Wireless communication                                  |                               |                           | <b>~</b>   |
| Pump air control (PAC)                                  | <b>✓</b>                      |                           | <b>~</b>   |
| Flexibility. Accommodate emerging demands to m          | aintain or expand productivit | ty and profitability.     |            |
| Norks with mobile roll-around packages                  |                               | <b>✓</b>                  | ~          |
| Easy expansion with additional fluids                   |                               | <b>~</b>                  | <b>✓</b>   |
| Easy upgrade to comprehensive fluid management          |                               | <b>✓</b>                  | N/A        |
| <b>User Interface.</b> Access the information necessary | to make more informed deci    | sions quickly.            |            |
| Simple PC-based software                                |                               | <b>~</b>                  |            |
| No software to install (Web-based)                      |                               |                           | <b>~</b>   |
| Accessible from any PC, phone or tablet                 |                               |                           | <b>~</b>   |
| Fluid Management. Improve accountability for you        | ur entire operations.         |                           |            |
| Track dispenses by invoice or work order                |                               |                           | ~          |
| Track dispenses by technician                           |                               |                           | <b>✓</b>   |
| Record fluid type and quantity dispensed                |                               |                           | <b>✓</b>   |
| Keeps technician in service bay                         |                               |                           | <b>~</b>   |
| Fluid Inventory. Simplify how you re-order and sto      | re inventory to minimize dela | ays.                      |            |
| Monitor tank levels (TLM)                               |                               |                           | <b>~</b>   |
| Dealer Management Solution (DMS) integration            |                               |                           | <b>✓</b>   |
| Reporting. Capture critical information and insights    | s to simplify decision-making | ].                        |            |
| Print on dispense                                       |                               |                           | ~          |
| Automated customizable reports                          |                               |                           | <b>✓</b>   |
| Automated alerts to simplify inventory tasks            |                               |                           | <b>~</b>   |
| Software updates  |                               | <b>✓</b>                  | <b>✓</b>   |
| Permanent record of all dispenses or authorizations     |                               | <b>~</b>                  | <b>~</b>   |



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



#### **Benefits of Pulse Pro Fluid Management**



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



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



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



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



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



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



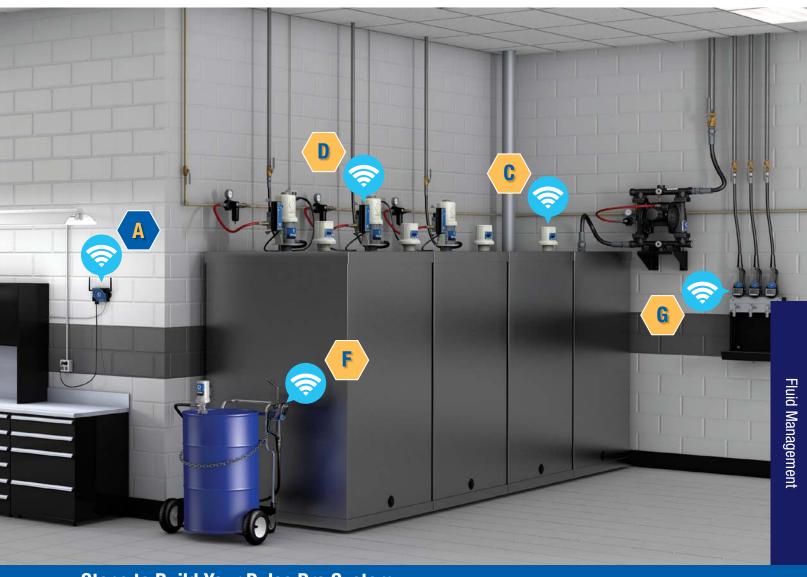
**Portability.** Pair with mobile dispense units and drums easily to reduce extra steps and hassles for technicians.



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



## **Pulse® Pro Fluid Management**



## **Steps to Build Your Pulse Pro System:**



#### **Add Accessories**



## **Pulse® Pro Fluid Management**



#### **Pulse Hub**



There's no software to install. 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.

## No Software to Install

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

#### Status Lights

Weight

To Hub

Warranty

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.

#### **Technical Specifications** 1.0 lb (454 gm) **Power Supply** Input Power 100-240 VAC line voltage (0.05 A)

5 VDC (0.5 amps)

Two years electronics



#### **Ordering Information**

Easily Updates

Automatic updates through internet connection.

| Part Number | Description   |
|-------------|---|
| 24Z978      | Hub for non-European installation with global power adapter |

#### **Pulse Software**

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

#### Features and Benefits

- No 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





### **Dealer Management System (DMS) Integrations**

Gain even more efficiencies by interfacing Pulse Pro with your existing DMS. Provides billing and workflow improver fluid dispense records.

#### Features and Benefits

- Ease of use Interface is invisible to the technician
- Security Validate work orders
- Automation Ensures that all dispenses are billed
- Custom Integrate to DMS/business system
- Detailed reporting Each job performed is recorded with information returned to DMS

#### **How It Works**

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





For the most up to date list of available DMS integrations, please visit dms.gracopulse.com.















#### **Pulse Dispense Meter**

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

GRACO



#### Large, Intuitive Display

High-contrast display for lowand bright-light conditions.

#### Faster PIN Entry

Built-in NFC reader and simple, efficient controls.

#### Wireless Communication

Communicates dispense information with Hub.

#### Ergonomic Design

Lower button placement.



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

#### Long Battery Life

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

#### Long-Life Valve Design

Cartridge design for long life and easier repair.

#### **Protective Trigger Guard**

Prevents accidental dispenses.

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

<sup>\*</sup>Tested in 10W motor oil. Flow rates vary with fluid pressure, temperature and viscosity.

<sup>&</sup>quot;Battery required to meet life expectancy: Energizer" Akaline E91.

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















#### 8 gpm (30 lpm) Meters

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

#### 18 gpm (68 lpm) Meters

| Fluid              | Extension | Nozzle              | Size (in) | Part Number |        |
|--------------------|-----------|---------------------|-----------|-------------|--------|
|                    | Flexible  | Manual<br>High-Flow | Manual    | 1/2         | 25M324 |
| Oil / Anti-Freeze  | Rigid     |                     | 1/2       | 25M323      |        |
| OII / AIIII-FIEEZE | Flexible  | Manual              | Manual    | 2/4         | 25M330 |
|                    | Rigid     | High-Flow           | 3/4       | 25M329      |        |

#### **Accessories**

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

|  | Extension   | Fluid           | Nozzle Description               | Part Number | Compatible Meters           |
|--|-------------|-----------------|----------------------------------|-------------|-----------------------------|
|  |             | Oil             | Non-drip, quick-close            | 255852      | 25M317                      |
|  | Rigid       | Anti-freeze     | Non-drip, quick-close            | 26C267      | 25M318                      |
| <b>*</b>   |             | Oil/Anti-freeze | High-flow, non-drip, quick-close | 255857      | 25M323 / 25M329             |
| P <sub>0</sub>   | Rigid       | Gear lube       | Non-drip, quick-close            | 255854      | 25M326                      |
| 90   |             | Oil             | Automatic, non-drip, quick-close | 255853      | 25M319                      |
|  | Flexible    | Anti-freeze     | Non-drip, quick-close            | 26C268      | 25M320                      |
|  |             | Oil/Anti-freeze | High-flow, non-drip, quick-close | 255858      | 25M324 / 25M330             |
|  |             | Oil             | Automatic, non-drip, quick-close | 17R220      | 8 gpm oil meters            |
| THE STATE OF THE S | Nozzle Only | Anti-freeze     | Non-drip, quick-close            | 17T207      | 8 gpm anti-freeze<br>meters |
|  |             | Oil/Anti-freeze | High-flow, non-drip, quick-close | 255461      | 18 gpm meters               |
| 90   | Nozzle Only | Gear lube       | Non-drip, quick-close            | 255470      | 8 gpm gear lube<br>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 |
|----------|-------------|-------------|
| 0 GRACO  | 17S659      | Red         |
| () GRACO | 17S660      | Blue        |
| O GRACO  | 17S661      | Green       |
| O GRACO  | 17S662      | Yellow      |
| O GRACO  | 17S663      | White       |

#### **Swivel Covers / Impact Protection**

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

#### **Pulse Meter Filter Kits**

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



## **Pulse® Pro Fluid Management**













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



#### 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) |  |

| nical 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.

#### Simple Wireless Setup

Automatic network identification.

#### High-Volume Air Valve

Supports a variety of pumps.

#### Multiple Thread Options

NPT and BSPP air valve options.



#### Compact Design

Allows for mounting directly on pump or in tight spaces.

#### Rugged Exterior

Sealed enclosure to protect internal components.

#### Multiple Wiring Options

NEMA 5-15 plug or flying leads.



## Ordering Information

| Part Number | Description             |  |  |
|-------------|-------------------------|--|--|
| 24Z728      | NPT with NEMA 5-15 plug |  |  |

| Technical Specifications                       |  |  |  |  |
|--|--|--|--|--|
| 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 SJ00W, 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                                |  |  |  |





## **2 Year** *Warranty!*

#### **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.



| Tec                        | Technical Specifications |  |  |  |  |  |
|----------------------------|--------------------------|--|--|--|--|--|
|                            | Operating Temperature    | 32°F to 158°F (0°C to 70°C)            |  |  |  |  |
| Power Input  Length  Width |                          | Universal AC input (85 VAC to 265 VAC) |  |  |  |  |
|                            |                          | 2.87 in (7.3 cm)                       |  |  |  |  |
|                            |                          | 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.

Pulse"

Remote

Extender



#### Expands Pulse Network

Supports 20 devices and extends the network range.

#### Simple Wireless Setup

Automatic network identification.

#### Multiple Network Connection Options

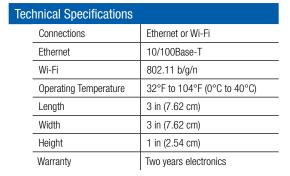
Utilizes local network Ethernet or Wi-Fi to communicate back to Hub.

#### Compact Design

Easy to place even in tight spaces.

#### **Electrical Power**

Includes plug-in power adapter.





#### **Ordering Information**

| Part Number | Description                               |
|-------------|---|
| 17F878      | Remote Extender with global power adapter |















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



#### Oil Bar

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



#### il Rar

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

#### **Accessories**

| Can. | 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.

| edimedia. | Part Number | Description   |
|-----------|-------------|---|
|           | 25D625      | Includes Pulse Hub (24Z978), Pulse Dispense<br>Meter, Pulse TLM (25M449), Pulse PAC<br>(24Z728), Pulse Extender (17F885), Pulse<br>Remote Extender (17F878), Pulse NFC Tag,<br>case and protective foam |

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



#### **HOW IT WORKS**

1 REQUIRED

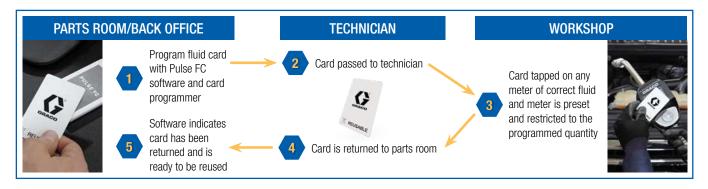
Pulse FC is a fluid control system that utilizes SD Preset meters. When put into Pulse FC mode, SD Preset meters will only dispense fluid when authorized with Fluid Cards. These included cards are programmed using the Pulse FC Software and Card Programmer. Once programmed, the cards are simply tapped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

**MINIMUM 1 REQUIRED** 

Add Accessories

Roll Around Package

**OPTIONAL** 











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



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



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



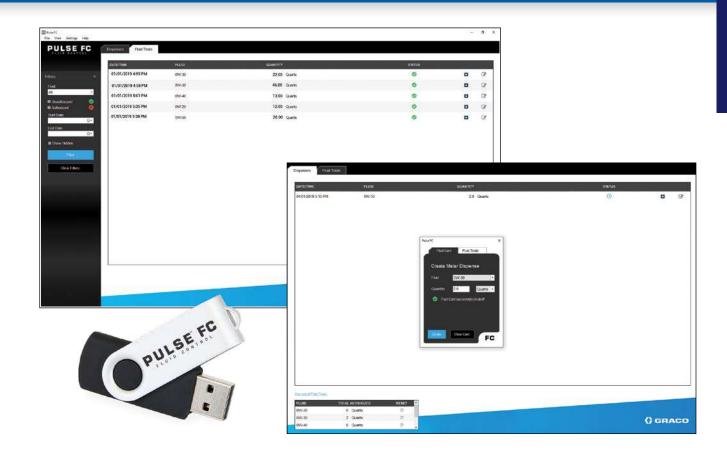
**Scalability.** Add Pulse FC into almost any environment quickly, even retrofit applications and avoid excessive installation costs and delays. You can also easily upgrade to Graco's Pulse Pro.



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

#### **Pulse FC Software**

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













### **Pulse FC Starter Kit**

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



#### Pulse FC Fluid Cards

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

Easy-to-follow instructions for quick system setup.

#### Pulse FC Software

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

### A > Ordering Information

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











## SD<sup>™</sup> Preset Dispense Meters

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



GRACO



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

#### **Upgrade Option**

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

#### **High Flow**

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

#### **Durable Cast Body**

Designed for heavy duty and harsh applications.

#### Automatic Quick-Close Nozzle

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

#### Long-Life Valve Design

Cartridge design for fewer and easier repairs.

#### Ergonomic Handle Design

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

#### **Typical Applications**

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

#### Typical Fluids Handled

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

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

<sup>\*</sup>Tested in 10W motor oil. Flow rates vary with fluid pressure, temperature and viscosity.



<sup>\*\*</sup>At 2.5 gpm (9.5 lpm), at 70°F (21°C), with 10-weight oil and 1 gallon dispensed. May require calibration.

<sup>\*\*\*</sup>Battery required to meet life expectancy: Energizer® Alkaline E91.











### Ordering Information

#### **SD<sup>™</sup> Preset Electronic Meters**



|      | Dispense<br>Type             | Flow Range<br>gpm (lpm) | Fluid          | Extension        | Inlet in (NPT) | Part Number |              |           |           |           |            |             |             |            |           |          |
|------|------------------------------|-------------------------|----------------|------------------|----------------|-------------|--------------|-----------|-----------|-----------|------------|-------------|-------------|------------|-----------|----------|
|      |                              |                         | Oil            | Rigid            | 1/2            | 26C384      |              |           |           |           |            |             |             |            |           |          |
|      |                              |                         | UII            | Flexible         | 1/2            | 26C354      |              |           |           |           |            |             |             |            |           |          |
| SDP8 | Preset<br>(Pulse FC enabled) | 0.25–8<br>(1–30)        |                | 0.25–8<br>(1–30) | Anti-freeze    | Anti-freeze | Rigid        | 1/2       | 26C385    |           |            |             |             |            |           |          |
|      | (r dico r o oriabica)        | (. 55)                  | Anu-ireeze     | Anti-freeze      |                |             | Aliii-lieeze | Anu-neeze | Anu-neeze | Ann-neeze | Anti-neeze | Aliu-lieeze | Aliu-lieeze | Anti-neeze | Anu-neeze | Flexible |
|      |                              |                         | Gear lube      | Rigid            | 1/2            | 26C358      |              |           |           |           |            |             |             |            |           |          |
|      |                              | 0.25–18                 | Rigid          | 1/2              | 26C356         |             |              |           |           |           |            |             |             |            |           |          |
| 18   | Preset                       |                         | Preset 0.25–18 | Flexible         | 1/2            | 26C357      |              |           |           |           |            |             |             |            |           |          |
| SDP1 | (Pulse FC enabled) (1—68)    | Oil                     | Rigid          | 3/4              | 26C360         |             |              |           |           |           |            |             |             |            |           |          |
|      |                              |                         | Flexible       | 3/4              | 26C361         |             |              |           |           |           |            |             |             |            |           |          |

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

|            | Extension   | Fluid           | Nozzle Description               | Part Number | Compatible Meters |
|------------|-------------|-----------------|----------------------------------|-------------|-------------------|
|            |             | Oil             | Non-drip, quick-close            | 255852      | SDP8              |
|            | Rigid       | Anti-freeze     | Non-drip, manual open/close      | 26C267      | SDP8              |
| 8          |             | Oil/Anti-freeze | High-flow, non-drip, quick-close | 255857      | SDP18             |
| <b>N</b> . | Rigid       | Gear lube       | Non-drip, quick-close            | 255854      | SDP8              |
|            |             | Oil             | Automatic, non-drip, quick-close | 255853      | SDP8              |
|            | Flexible    | 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              |
| 4          | 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              |











#### Ordering Information

#### **Roll Around Package**

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

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

#### Oil Bar

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



#### Oil Bar

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

#### **Accessories**

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

| 1              | Part Number | Description                              |
|----------------|-------------|--|
| OUACO<br>OUACO | 130783      | Pulse FC Fluid Cards – 50-Pack,<br>White |

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

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

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

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

#### **Swivel Covers / Impact Protection**

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

#### **Hose Identification Wraps**

Vinyl hose wrap for easy identification of meter fluid.

|          | Part Number | Description |
|----------|-------------|-------------|
| () GRACO | 17S659      | Red         |
| () GRACO | 17S660      | Blue        |
| O GRACO  | 17S661      | Green       |
| O GRACO  | 17S662      | Yellow      |
| OGRACO   | 17S663      | White       |

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











#### >>> Ordering Information

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

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

#### **Air Solenoid Valves**

| Part Number | Description  |
|-------------|--|
| 215407      | Air solenoid valve, 150 psi (10 bar) (1/2 npsm (f) conduit ports for wiring; 1/4 in NPT(F) air ports, adapted to 3/8 (f) IN, 3/8 (m) OUT) operates on 24V DC and 110 VAC. Automatically shuts-off air inlet to pump when pre-set dispensed amount is reached. Materials of construction: brass, SST, Buna. |
| 105474      | Air solenoid valve (bare) 150 psi (10 bar), same as 215407 but without wire connectors or adapters. 1/2 in npsm (f) conduit ports for wiring; 1/4 in NPT(F) air ports.150 psi (10.3 bar) max. working pressure.  |

#### **Fluid Solenoid Valves**

| Part Number | Description   |
|-------------|---|
| 215487      | Fluid solenoid valve, 1/2 in NPT(F) 3,000 psi (207 bar) operates on 24V DC. Automatically shuts-off fluid when pre-set dispensed amount is reached. Includes tube, valve, pin connector, wire plug connector and adapter. |
| 514150      | Fluid solenoid valve for 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  |

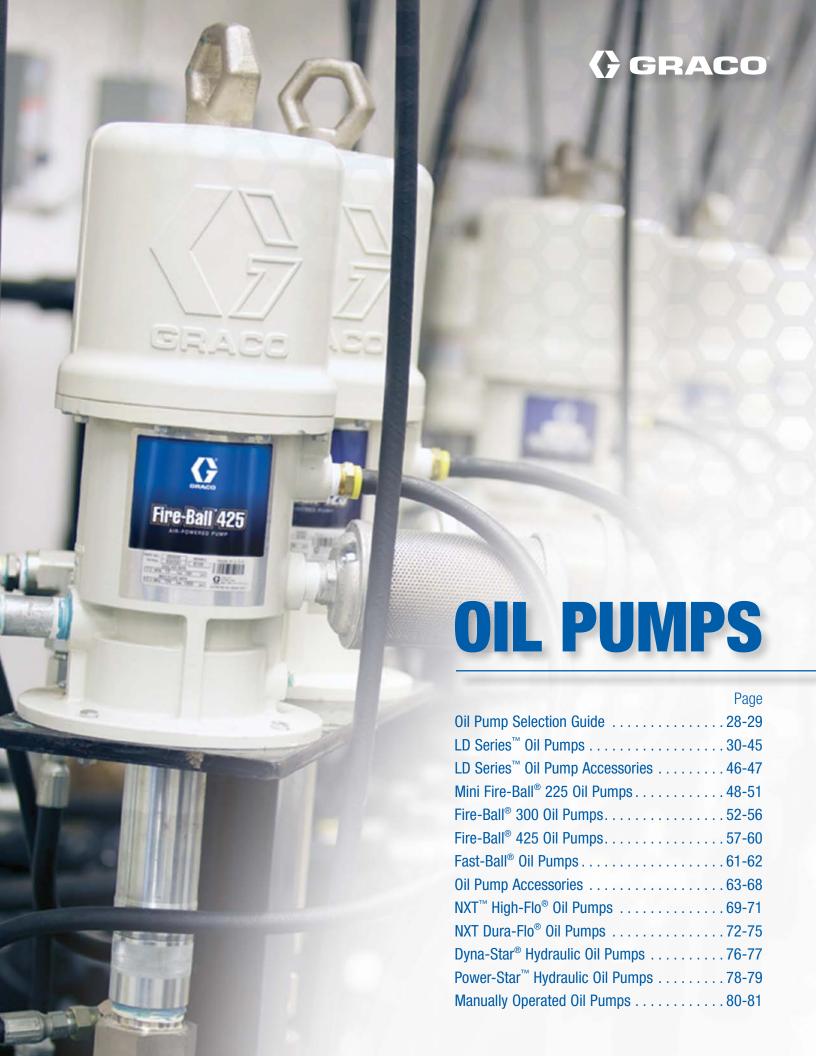
#### **Installation Components**

| 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 |





## **Oil Pump Selection Guide**

| Pump Family and<br>Fluid Pressure Ratio | Typical Applications  | Annual<br>Usage             | Line<br>Length               | Simultaneous<br>Dispense<br>Points | Approx.<br>Free Flow<br>Rate @ 100 psi | Air<br>Inlet | Fluid<br>Inlet | Fluid<br>Outlet | Air Operation<br>Range        | Reference<br>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<br>(19,00 l)      | < 100 ft<br>(30 m)           | 1 (no reels)                       | 5 gpm<br>(19 lpm)                      | 1/4 NPT(F)   | 1-1/2 NPT(F)   | 3/4 NPT(F)      | 40-80 psi<br>(2.7-12.5 bar)   | 62                |
| LD, 3:1                                 | Automotive dealerships     Fast lube centers     Lube trucks     Lubricant transfer     Service shops   | 20,000 gal<br>(75,000 l)    | 300 ft<br>(91 m)             | 1 to 2                             | 7.8 gpm<br>(30 lpm)                    | 1/4 NPT(F)   | 1 NPT(F)       | 1/2 NPT(F)      | 20-150 psi<br>(1.37-10.3 bar) | 30                |
| LD, 5:1                                 | Automotive dealerships     Fast lube centers     Lube trucks     Lubricant transfer     Service shops   | 20,000 gal<br>(75,000 l)    | 300 ft<br>(91 m)             | 1 to 2                             | 6.7 gpm<br>(25 lpm)                    | 1/4 NPT(F)   | 1 NPT(F)       | 1/2 NPT(F)      | 20-150 psi<br>(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<br>(113,500 l)   | 250 ft<br>(76 m)             | 1 to 2                             | 8.3 gpm<br>(32 lpm)                    | 3/8 NPT(F)   | 1-1/2 NPT(F)   | 1/2 NPT(F)      | 40-180 psi<br>(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<br>(132,000 l)   | 500 ft<br>(152 m)            | 1 to 3                             | 12.1 gpm<br>(46 lpm)                   | 3/8 NPT(F)   | 1-1/2 NPT(F)   | 1/2 NPT(F)      | 40-180 psi<br>(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<br>(132,000 l) | Up to<br>250 ft<br>(76 m)    | 3 to 4                             | 28.7 gpm<br>(109 lpm)                  | 1/2 NPT(F)   | 1-1/2 NPT(F)   | 3/4 NPT(F)      | 40-180 psi<br>(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<br>(132,000 l  | Up to<br>500 ft<br>(152 m)   | 3 to 4                             | 17.1 gpm<br>(65 lpm)                   | 1/2 NPT(F)   | 1-1/2 NPT(F)   | 3/4 NPT(F)      | 40-180 psi<br>(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<br>(132,000 l  | Up to<br>750 ft<br>(228.6 m) | 3 to 4                             | 11.7 gpm<br>(44 lpm)                   | 1/2 NPT(F)   | 1-1/2 NPT(F)   | 3/4 NPT(F)      | 40-180 psi<br>(2.8-12 bar)    | 57                |

## **Oil Pump Selection Guide**

| Pump Family and<br>Fluid Pressure Ratio | Typical Applications  | Annual<br>Usage             | Line<br>Length            | Simultaneous<br>Dispense<br>Points | Air<br>Inlet | Fluid<br>Inlet  | Fluid<br>Outlet | Air Operation<br>Range     | Reference<br>Page |
|---|---|-----------------------------|---------------------------|------------------------------------|--------------|-----------------|-----------------|----------------------------|-------------------|
| NXT High Flo, 3.5:1                     | Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill | > 35,000 gal<br>(132,000 l) | Up to 250 ft<br>(76 m)    | 4 to 5                             | 3/4 NPT(F)   | 1-1/2<br>NPT(F) | 1 NPT(F)        | 20-100 psi<br>(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<br>(132,000 l) | Up to 450 ft<br>(137 m)   | 4 to 5                             | 3/4 NPT(F)   | 1-1/2<br>NPT(F) | 1 NPT(F)        | 20-100 psi<br>(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<br>(132,000 l) | Up to 500 ft<br>(152 m)   | 4 to 5                             | 3/4 NPT(F)   | 2 NPT(F)        | 2 NPT(F)        | 20-75 psi<br>(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<br>(132,000 l) | Up to 500 ft<br>(152 m)   | 2 to 4                             | 3/4 NPT(F)   | 2 NPT(F)        | 1-1/2<br>NPT(F) | 20-100 psi<br>(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<br>(132,000 l) | Up to 750 ft<br>(228.6 m) | 2 to 4                             | 3/4 NPT(F)   | 2 NPT(F)        | 1-1/2<br>NPT(F) | 20-100 psi<br>(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<br>(132,000 l) | Up to 1000 ft<br>(305 m)  | 2 to 4                             | 3/4 NPT(F)   | 2 NPT(F)        | 1-1/2<br>NPT(M) | 20-100 psi<br>(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<br>(132,000 l) | Up to 1000 ft<br>(305 m)  | 2 to 4                             | 3/4 NPT(F)   | 2 NPT(F)        | 1-1/2<br>NPT(M) | 20-75 psi<br>(1.4-5.2 bar) | 72                |

| Pump Family and<br>Fluid Pressure Ratio | Typical Applications   | Maximum<br>Output<br>Flow Rate | Maximum<br>Fluid Output<br>Pressure | Hydraulic<br>Inlet | Hydraulic<br>Outlet | Fluid<br>Inlet | Fluid<br>Outlet | Maximum<br>Hydraulic<br>Inlet Pressure | Reference<br>Page |
|---|--|--------------------------------|-------------------------------------|--------------------|---------------------|----------------|-----------------|--|-------------------|
| Dyna-Star 1:1                           | Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops | 3 gpm<br>(11 lpm)              | 1500 psi<br>(102 bar)               | 3/8 NPT(F)         | 3/4 NPT(F)          | 1-1/2 NPT(F)   | 1/2 NPT(F)      | 1500 psi<br>(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<br>(38 lpm)             | 375 psi<br>(25.1 bar)               | 3/8 NPT(F)         | 3/4 NPT(F)          | 1-1/2 NPT(F)   | 1/2 NPT(F)      | 1500 psi<br>(102 bar)                  | 76                |
| Power-Star 1:1                          | Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops | 12 gpm<br>(45 lpm)             | 1500 psi<br>(102 bar)               | 3/4 NPT(F)         | 1-1/4 NPT(F)        | 1-1/2 NPT(F)   | 1/2 NPT(F)      | 1500 psi<br>(102 bar)                  | 78                |











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**

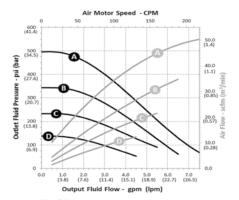
- · Automotive dealerships
- Fast lube centers
- Service shops

#### Typical Fluids Handled

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

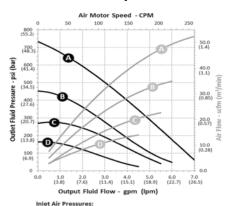
#### **Pump Performance**

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



| Test Fluid :

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



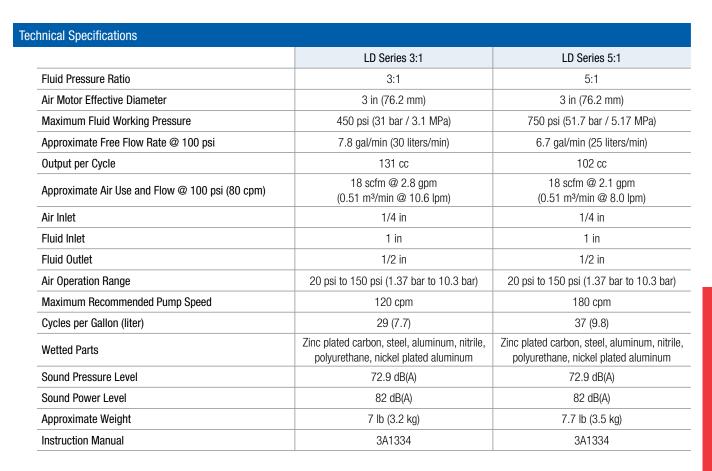
(3) = 150 psi (10.3 bar) (8) = 100 psi (6.9 bar) (2) = 70 psi (4.8 bar) (2.8 bar) Test Fluid:











#### Ordering Information

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

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

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

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

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









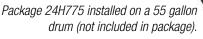
**Ordering Information** 

#### Mobile Oil Packages - Cart

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



\*CE packages include 2-way vented valve (BSP: 125041 / NPT: 110223) and air regulator (BSP: 24H419 / NPT: 24H420).













#### **Mobile Oil Packages - Dolly**

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





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





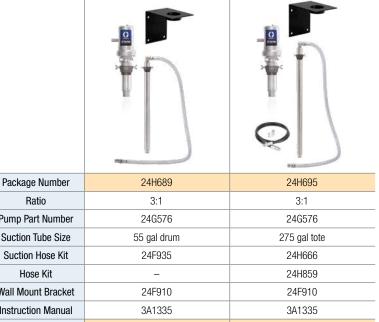


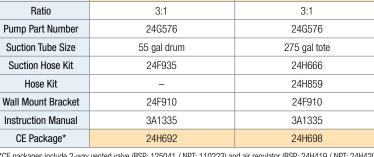


#### **Ordering Information**

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

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









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.

|                    |           |           |           | No.       |
|--------------------|-----------|-----------|-----------|-----------|
| 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    |
| CE Package*        | 24H812    | 24H811    | 24H814    | 24H813    |

<sup>\*</sup>CE packages include 2-way vented valve (BSP: 125041 / NPT: 110223) and air regulator (BSP: 24H419 / NPT: 24H420).







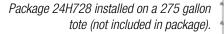


#### **Stationary Oil Packages – Tote**

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          | Тор   | Тор  | 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 /<br>6 ft x 1/2 in fluid hose | 6 ft x 3/8 in air hose /<br>6 ft x 1/2 in fluid hose | 6 ft x 3/8 in air hose /<br>6 ft x 1/2 in fluid hose |
| Hose Kit Part Number       | 24J495  | 24J495   | 24H495   | 24J495   |
| Top Mount Tote Bracket     | 24F930  | 24F930   | 24F931   | 24F931   |
| Tote Mount Pump<br>Bracket | -   | _  | 24F920   | 24F920   |
| Meter Tray                 | 24F914  | 24F914   | 24F914   | 24F914   |
| Instruction Manual         | 3A1335  | 3A1335   | 3A1335   | 3A1335   |
| CE Package*                | 24H714  | 24H716   | 24H738   | 24H740   |

 $<sup>^{\</sup>star}$ CE packages include 2-way vented valve (BSP: 125041 / NPT: 110223) and air regulator (BSP: 24H419 / NPT: 24H420).





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









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        | 256216            | 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            |  |











### **Tank Mount Oil Packages**

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



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









### Ordering Information

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

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









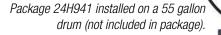


### Mobile Oil Packages - Cart

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



\*CE packages include 2-way vented valve (BSP: 125041 / NPT: 110223) and air regulator (BSP: 24H419 / NPT: 24H420).





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









Ordering Information

### **Mobile Oil Packages - Dolly**

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





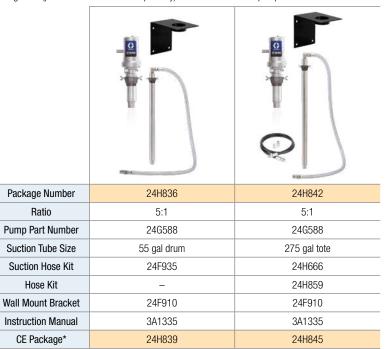




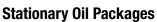
# Ordering Information

### **Wall Mount Oil Packages**

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



<sup>\*</sup>CE packages include 2-way vented valve (BSP: 125041 / NPT: 110223) and air regulator (BSP: 24H419 / NPT: 24H420).



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



<sup>\*</sup>CE packages include 2-way vented valve (BSP: 125041 / NPT: 110223) and air regulator (BSP: 24H419 / NPT: 24H420).



tote (not included in package).



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









Ordering Information

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

Standard packages include LD Series hose reel. 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)                                    |
| Pump Downtube              | 16F885   | 16F885   | 24H669   | 24H669   |
| Mounting Position          | Тор  | Тор  | Drain  | Drain  |
| Reel Type                  | LD   | LD   | LD   | LD   |
| Hose Reel Part Number      | 24H662   | 24H662   | 24H662   | 24H662   |
| Hose Size                  | 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 /<br>6 ft x 1/2 in fluid hose | 6 ft x 3/8 in air hose /<br>6 ft x 1/2 in fluid hose | 6 ft x 3/8 in air hose /<br>6 ft x 1/2 in fluid hose | 6 ft x 3/8 in air hose /<br>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<br>Bracket | -  | -  | 24F920   | 24F920   |
| Meter Tray                 | 24F914   | 24F914   | 24F914   | 24F914   |
| Instruction Manual         | 3A1335   | 3A1335   | 3A1335   | 3A1335   |
| CE Package*                | 24H880   | 24H882   | 24H904   | 24H906   |

 $<sup>^{\</sup>star}$ CE packages include 2-way vented valve (BSP: 125041 / NPT: 110223) and air regulator (BSP: 24H419 / NPT: 24H420).

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











Instruction Manual

### **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.



3A1335

3A1335



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









Ordering Information

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

 $\label{eq:linear_problem} \mbox{Air regulator (part 24H420-ordered separately) must be used for LD pump thermal relief function.}$ 











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

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





# **LD Series Oil Pump Accessories**









# >>> Ordering Information

# **Air Regulators**

| 186 |
|-----|
|     |
|     |
|     |

|  | Part Number | Description   |
|--|-------------|---|
| 24H420 Mini air pressure regulator with gauge, 1/4 in NPT x 3/8 in NPT, self-relieving |             | 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 |             | Universal cut to length PVC downtube |
| 16F886 Drum length steel downtube           |             | 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   |               |        |               |
|---------------|------------------------------|----------------|---------------|--------|---------------|
| rait Nullibel | υσουτριίοπ                   | 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 |  |
| LD oil pump suction hose kit for 275 gal (1,040 L) drum. Includes 275 gal (1,040 L) tote length metal downtub bung adapter, foot valve and 6 ft of 1 in suction hose                           |  |  |
| 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 |        | Description                          |
|-------------------------|--------|--------------------------------------|
|                         | 24F910 | LD Series pump wall mounting bracket |
|                         | 24F918 | Bung adapter                         |

### **Tote Mount Accessories**

| T in                                    | Part Number | Description   |  |
|---|-------------|---|--|
|   | 24F914      | Meter drip tray for mounting to the side of IBC tote  |  |
| 41                                      | 24F932      | LD Series reel bracket for mounting reel to IBC top mount tote bracket (24F930 and 24F920)                    |  |
|   | 24F931      | Tote mounting bracket to mount reel on top of IBC tote (pump mounting bracket is not included)                |  |
| 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 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) |  |

Fire-Ball 225









# Perfect for Medium Pressure, Low-Volume Applications

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

### **Durable Casting**

Thick cast aluminum air motor housing offers unmatched durability.

### Fewer Repairs

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

#### Extended Seal Life

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

### Superior Sealing

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

### Corrosion-Resistant

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

#### Typical Applications

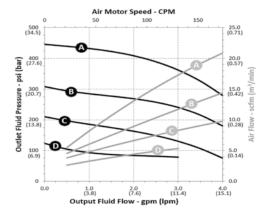
- · Automotive dealerships
- Fast lube centers
- Service shops
- Heavy-duty dealerships
- · Fleet services facilities
- In-plant
- · Lube trucks
- Mining

#### Typical Fluids Handled

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

#### **Pump Performance**

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













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

# >>> Ordering Information

# Mini Fire-Ball 225 3:1 Pumps

|   | Part Number | Description   |  |  |
|---|-------------|---|--|--|
| 246775 3:1 Universal oil pump                     |             |   |  |  |
| 248097 3:1 Universal oil pump with suction tube ( |             | 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**



<sup>\*</sup>Order low-level shut-off (203688) (1-1/2 in NPT) separately for metered dispense systems.



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









### **Bulk Oil Dispensing Packages**



<sup>\*</sup>Order (218549) (1/2 in x 24 in) hose kit separately.



10

Fire-Ball 300









## 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

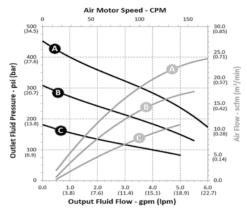
- · Automotive dealerships
- · Fast lube centers
- Service shops
- Heavy-duty dealerships
- · Fleet services facilities
- In-plant
- · Lube trucks
- Mining

### Typical Fluids Handled

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

### Pump Performance

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



#### Inlet Air Pressures:











| 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 m³/min @ 10.6 lpm) |  |  |  |  |
| Air Inlet                                       | 3/8 in NPT(F)                              |  |  |  |  |
| Fluid Inlet                                     | 1-1/2 in NPT(F)                            |  |  |  |  |
| Fluid Outlet                                    | 1/2 in NPT(F)                              |  |  |  |  |
| Air Operation Range                             | 40 psi to 180 psi (2.8 bar to 12 bar)      |  |  |  |  |
| Maximum Recommended Pump Speed                  | 70 cpm                                     |  |  |  |  |
| Cycles per Gallon (Liter)                       | 28.4 (7.5)                                 |  |  |  |  |
| Wetted Parts                                    | Steel, polyurethane, aluminum, Buna-N      |  |  |  |  |
| Sound Pressure Level                            | 77.8 dB(A)                                 |  |  |  |  |
| Sound Power Level                               | 85.6 dB(A)                                 |  |  |  |  |
| Approximate Weight                              | 17 lb (7.7 kg)                             |  |  |  |  |
| Instruction Manual                              | 306518                                     |  |  |  |  |

# >>> Ordering Information

# Fire-Ball 300 5:1 Pumps

| Part Number | Description  |
|-------------|--|
| 203876      | 5:1 Universal oil pump                                   |
| 203872      | 5:1 Oil pump, 16 gal (120 lb) drum size, for cover mount |
| 203857      | 5:1 Oil pump, 55 gal (400 lb) drum size, for cover mount |
| 204254      | 5:1 Oil pump, 55 gal (400 lb) drum size, bung mount      |
| 222087      | 5:1 Oil pump, 275 gal (1,040 lb) tank size, bung mount   |

# Fire-Ball 300 5:1 Oil Pump Packages









**Ordering Information** 

### **Oil Pump Packages**



 $<sup>^{\</sup>star}$ 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.



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









### **Bulk Oil Dispensing Packages**

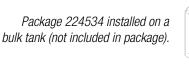


218549

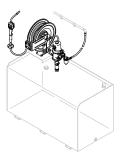
Thermal Relief Valve

Hose Reel Inlet Kit

(Not Included)



218549



218549

237893

218549

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

# Fire-Ball 300 5:1 Oil Pump Packages









# **Lube Truck Packages**



| Package Number                | 222086*                            | 206655*                            | 204264*                            |  |
|-------------------------------|------------------------------------|------------------------------------|------------------------------------|--|
| Ratio                         | 5:1                                | 5:1                                | 5:1                                |  |
| Package Type                  | Lube truck                         | Lube truck                         | Lube truck                         |  |
| Maximum<br>Container Size     | 16 gal (60l) open-head             | 55 gal (2001) closed-head          | 55 gal (200l) closed-head          |  |
| Pump                          | 203872                             | 203857                             | 204254                             |  |
| Dispense/<br>Hose Fitting Kit | 222063                             | 222063                             | 222063                             |  |
| Fluid Hose Size               | 1/2 in x 6 ft<br>(12.7 mm x 1.8 m) | 1/2 in x 6 ft<br>(12.7 mm x 1.8 m) | 1/2 in x 6 ft<br>(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                             |  |
| CE Package                    | 241050                             | 241051                             | 241052                             |  |

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









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

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

### **Durable Casting**

Thick cast aluminum air motor housing offers unmatched durability.

### Fewer Repairs

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

### Superior Sealing

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

### Extended Seal Life

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

### Corrosion-Resistant

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

#### **Typical Applications**

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

### Typical Fluids Handled

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

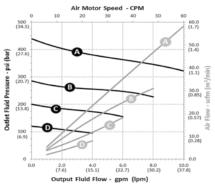






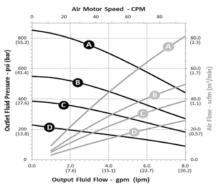


### Fire-Ball 425 3:1 Pumps



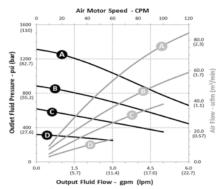


### Fire-Ball 425 6:1 Pumps





### Fire-Ball 425 10:1 Pumps





| chnical 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<br>(1.23 m³/min @ 50.6 lpm) | 44 scfm @ 6.7 gpm<br>(1.25 m³/min @ 25.4 lpm) | 45 scfm @ 4.0 gpm<br>(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<br>(2.8 bar to 12 bar)       | 40 psi to 180 psi<br>(2.8 bar to 12 bar)      | 40 psi to 180 psi<br>(2.8 bar to 12 bar)      |  |
| Maximum Recommended Pump Speed                  | 66 cpm   | 78 cpm  | 60 cpm  |  |
| Cycles per Gallon (Liter)                       | 6 (1.6)  | 14.5 (3.8)                                    | 20 (5.3)                                      |  |
| Wetted Parts                                    | Steel, polyurethane, aluminum, nitrile         | Steel, polyurethane, aluminum, nitrile        | Steel, polyurethane, aluminum, nitrile        |  |
| Sound Pressure Level                            | 82 dB(A)                                       | 79.5 dB(A)                                    | 78 dB(A)                                      |  |
| Approximate Weight                              | 46 lb (20.9 kg)                                | 35 lb (15.9 kg)                               | 29 lb (13.2 kg)                               |  |
| Instruction Manual                              | 308485   | 308608  | 308655  |  |

# >>> Ordering Information

## Fire-Ball 425 Pumps

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



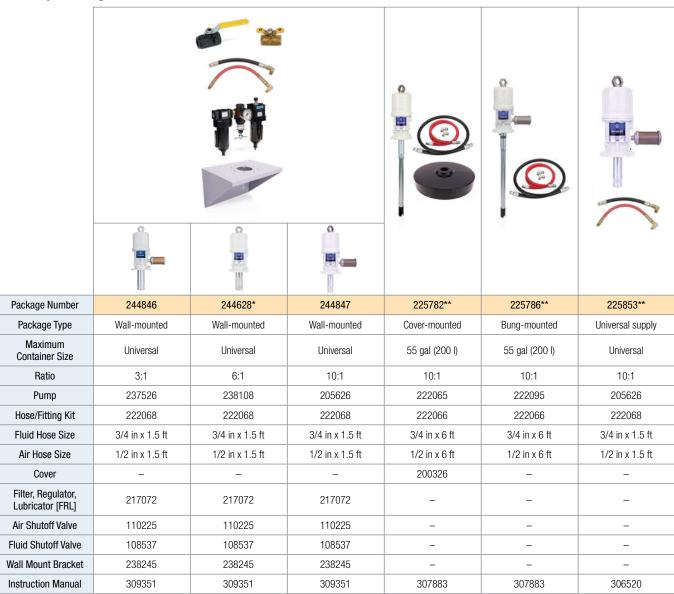








### **Oil Pump Packages**



<sup>\*</sup>Order low-level cut-off (203688) (1-1/2 in NPT) separately for metered dispense systems.

<sup>\*\*</sup>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<br>Container Size     | 55 gal (200 l) closed-head         | 55 gal (200 l) closed-head         |  |  |
| Pump                          | 222065                             | 222095                             |  |  |
| Dispense/<br>Hose Fitting Kit | 222066                             | 222066                             |  |  |
| Fluid Hose Size               | 1/2 in x 6 ft<br>(12.7 mm x 1.8 m) | 1/2 in x 6 ft<br>(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                             |  |  |
| CE Package 241056             |                                    | 241057                             |  |  |

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

Inlet Air Press

=100 psi (6.9 bar)

B =70 psi (4.8 bar)

(2.8 bar)

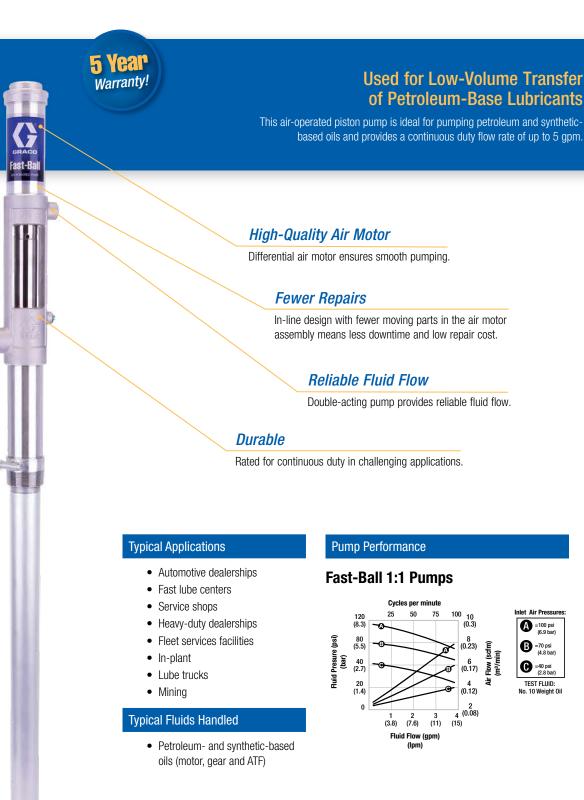
TEST FLUID: No. 10 Weight Oil













# **Fast-Ball 1:1 Oil Pumps**



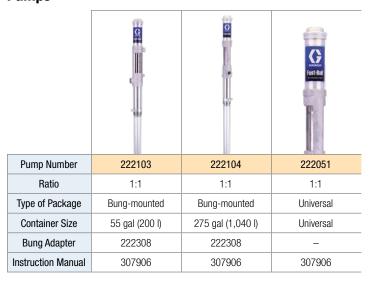




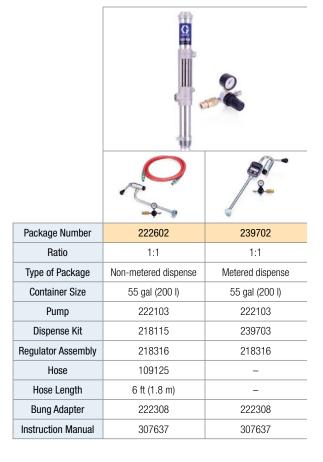
| echnical Specifications                         |   |
|---|---|
| Fluid Pressure Ratio                            | 1:1                                       |
| Air Motor Effective Diameter                    | 1.4 in (35.6 mm)                          |
| Maximum Fluid Working Pressure          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

# >>> Ordering Information

### **Pumps**



# **Pump Packages**





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



| 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                         |               | 222062 (18 in / 45.7 cm)<br>222063 (72 in / 182.8 cm) |                   | 238246 (24 in / 60.9 cm) | 238246 (24 in / 60.9 cm) | 222068 (18 in / 4537 cm)<br>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,<br>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            | -                        | -                        | -   |

<sup>\*</sup>Required



# >>> Ordering Information

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

|       | Part Number | Description |
|-------|-------------|-------------|
| 0 0 0 | 110223      | 1/4 in NPT  |
|       | 110224      | 3/8 in NPT  |
|       | 110225      | 1/2 in NPT  |
|       | 110226      | 3/4 in NPT  |

## **Bung Adapters**

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

### **Carts**

| Procession of the same of the | Part Number | Compatible Container Size                      |
|---|-------------|--|
|   | 203650      | 5 gal (20 l)<br>10 gal (40 l)<br>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<br>Mini Fire-Ball 225 3:1<br>Fire-Ball 300 5:1<br>Fire-Ball 425 6:1<br>Fire-Ball 425 10:1 |
|   | 210880      |  | Fire-Ball 300 5:1<br>Fire-Ball 425 10:1   |

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

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



### Ordering Information

#### **Downtube - Universal**

| n | 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) |

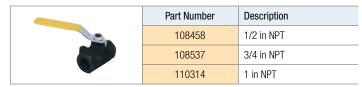
### **Drum Covers**

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

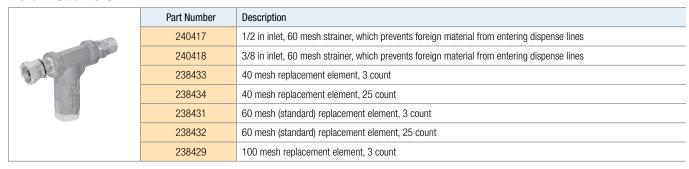
### **Drum Elevator**

| 3a• | Part Number | Description   |               |               |                 |
|-----|-------------|---|---------------|---------------|-----------------|
|     | Fait Number | Description   | Cover Support | Drum Elevator | Air Control Kit |
|     | 241663      | Air-powered elevator to speed up 55 gal (200 l)<br>drum changes | 207562        | 204385        | 207561          |

### Fluid Shut-Off Valves



### **Fluid T-Strainers**





# **Oil Pump Accessories**

# Ordering Information

### **Fluid Y-Strainers**



| Part Number | Description   |
|-------------|---|
| 110877      | 1/2 in NPT inlet/outlet strainer, which filters material before entering the pump |
| 110906      | 1/2 in NPT inlet/outlet strainer, replacement screen                              |
| 101078      | 3/4 in NPT inlet/outlet strainer, which filters material before entering the pump |
| 180199      | 3/4 in NPT inlet/outlet strainer, replacement screen                              |
| 110878      | 1 in NPT inlet/outlet strainer, which filters material before entering the pump   |
| 110907      | 1 in NPT inlet/outlet strainer replacement screen                                 |

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

|  |             |   | Connection | Includes |                          |            |                            |
|--|-------------|---|------------|----------|--------------------------|------------|----------------------------|
|  | Part Number | mber Description                            |            | Air Hose | Air Hose<br>Swivel Elbow | Fluid Hose | Fluid Hose<br>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**



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

| 50   | Part Number | Description | Compatible Container Size                      |
|--|-------------|-------------|--|
|  | 205054      | Band dolly  | 5 gal (20 l)                                   |
| de la companya del companya de la companya del companya de la comp | 204144      | Band dolly  | 10 gal (40 l)<br>16 gal (60 l)                 |
|  | 203622      | Caster base | 5 gal (20 l)<br>10 gal (40 l)<br>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.

| - 5   | Part Number | Inlet           |
|-------|-------------|-----------------|
| po de | 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<br>Mini Fire-Ball 225 3:1 |

### **Suction Kits**

|  | Don't Museline | Description   |              | Includes     |           |  |
|--|----------------|---|--------------|--------------|-----------|--|
|  | Part Number    |   | Bung Adapter | Bushing Pipe | 6 ft Hose |  |
|  | 236054         | Allows use of Fast-Ball, Mini-Fire-Ball and Fire-Ball<br>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   |                |           |             |
|---------------|------------------------------|------------------|--|----------------|-----------|-------------|
| rait Nullibei | Type of Mount                |                  | Companible Fumps   | Extension Size | Extension | Foot Spacer |
| 238592        | 16 gal (60 l)                | Cover-mounted    | Fact Dall 4 4  | 14-1/2 in      | 191126    | 110127      |
| 238593        | 55 gal (200 l)               | Cover-mounted    | Fast-Ball 1:1<br>Mini Fire-Ball 225 3:1<br>Fire-Ball 300 5:1<br>Fire-Ball 425 10:1 | 21-3/4 in      | 191128    | 110127      |
| 238595        | 55 gal (200 l)               | Bung-mounted     |  | 26 in          | 191130    | 110127      |
| 238596        | 275 gal (1,100 l)            | Bung-mounted     |  | 36 in          | 191131    | 110127      |

## **Thermal Relief Valve Kits**



| Part Number   | Pressure Rating Compatible | Compatible Pumps                       | Includes |              |        |           |
|---------------|----------------------------|--|----------|--------------|--------|-----------|
| Fait Nullibei |                            | Compannie Fumps                        | 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<br>Fire-Ball 425 6:1 | 112174   | 191075       | 155494 | 238370    |
| 248296        | 900 psi (62 bar)           | Fire-Ball 300 5:1<br>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  |
| 168085      | Insert tool   |

# **Wall-Mounting Brackets**



| Part Number | Description                                 | Compatible Pumps   |
|-------------|---|--|
| 203987      | Clamps onto universal pump tube             | Fast-Ball 1:1<br>Mini Fire-Ball 300 3:1<br>Fire-Ball 300 5:1<br>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)

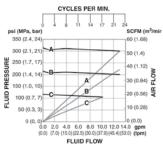






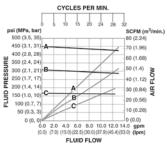
### **Pump Performance**

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



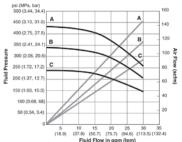


# **NXT 4.5:1 High-Flo Pumps**





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



| Inlet Air Pressures              | : |  |  |
|----------------------------------|---|--|--|
| A =70 psi<br>(4.8 bar)           |   |  |  |
| (3.7 bar)                        |   |  |  |
| (2.8 bar)                        |   |  |  |
| TEST FLUID:<br>No. 10 Weight Oil |   |  |  |

| chnical 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<br>(1.4 bar to 7 bar)                                   | 20 psi to 100 psi<br>(1.4 bar to 7 bar)                                   | 20 psi to 75 psi<br>(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,<br>UHMWPE, carbon steel                   | Stainless steel, PTFE, leather,<br>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<br>Pump – 311211<br>Pump Lower – 311690<br>Motor – 311238 | System – 312862<br>Pump – 311211<br>Pump Lower – 311690<br>Motor – 311238 | System – 312862<br>Pump – 311831<br>Pump Lower – 311832<br>Motor – 311238 |







# Ordering Information

# Oil Pump Packages with DataTrak

| Package Number<br>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<br>Fluid Pressure                 | 350 psi (24.1 bar)   | 450 psi (31 bar)    | 500 psi (35.2 bar)   | 500 psi (35.2 bar)   |
| Maximum<br>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

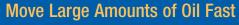
| Package Number<br>without DataTrak           | 24D602               | 24D603              | 24D606               | 24D607               |
|--|----------------------|---------------------|----------------------|----------------------|
| Ratio  | 3.5:1                | 4.5:1               | 6:1                  | 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<br>Fluid Pressure                    | 350 psi (24.1 bar)   | 450 psi (31 bar)    | 500 psi (35.2 bar)   | 500 psi (35.2 bar)   |
| Maximum<br>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               |











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

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

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

# Piston Valve with Floating Piston Seal

For maximum pressure balance over a range of material viscosities.

#### **Typical Applications**

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- In-plant
- Mining

### Typical Fluids Handled

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



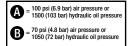






#### **Pump Performance**

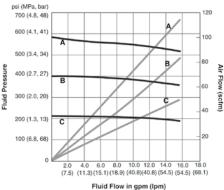
#### Inlet Pressures:



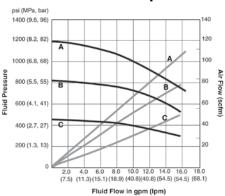
e 40 psi (2.8 bar) air pressure or 600 (41 bar) hydraulic oil pressure

TEST FLUID: No. 10 Weight Oil

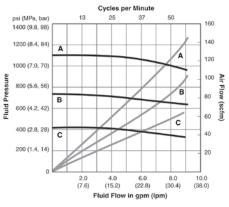
#### **NXT Dura-Flo 6:1 Pumps**



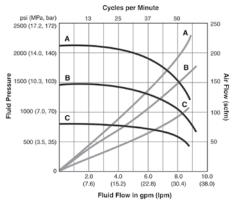
## **NXT Dura-Flo 10:1 Pumps**



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



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



# **NXT Dura-Flo Pumps**







| nnical Specifications             |   |   |  |  |
|-----------------------------------|---|---|--|--|
| Fluid Pressure Ratio              | 6:1   | 10:1  | 12:1   | 23:1   |
| Air Motor Effective Diameter      | 7.5 in (191 mm)   | 10.375 in (264 mm)  | 7.5 in (191 mm)  | 10.375 in (264 mm)   |
| Maximum Fluid<br>Working Pressure | 620 psi<br>(43 bar / 4.3 MPa)   | 1,180 psi<br>(81 bar / 8.1 MPa)   | 1,190 psi<br>(82 bar / 8.2 MPa)  | 1,725 psi<br>(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<br>(1.4 bar to 7 bar)   | 20 psi to 100 psi<br>(1.4 bar to 7 bar)   | 20 psi to 100 psi<br>(1.4 bar to 7 bar)  | 20 psi to 75 psi<br>(1.4 bar - 5.2 bar)  |
| Maximum Recommended<br>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,<br>chrome, zinc, nickel,<br>Buna-N, tungsten carbide,<br>nylon, UHMWPE, leather,<br>PTFE, PEEK | Stainless steel, CS,<br>chrome, zinc, nickel,<br>Buna-N, tungsten carbide,<br>nylon, UHMWPE, leather,<br>PTFE, PEEK | Stainless steel, CS,<br>chrome, zinc, nickel,<br>tungsten carbide,<br>ductile iron, acetal | Stainless steel, CS,<br>chrome, zinc, nickel,<br>tungsten carbide,<br>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<br>Pump – 311833<br>Pump Lower – 311717<br>Motor – 311238   | System – 312862<br>Pump – 311833<br>Pump Lower – 311717<br>Motor – 311238   | System – 312862<br>Pump – 311826<br>Pump Lower – 311825<br>Motor – 311238                  | System – 312862<br>Pump – 311826<br>Pump Lower – 311829<br>Motor – 311238                  |











# Oil Pump Packages with DataTrak

| Package Number<br>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<br>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<br>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<br>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<br>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<br>Pressure                    | 620 psi (42.7 bar)  | 1,180 psi (81.3 bar) | 1,190 psi (82.1 bar) |
| Maximum Air Input<br>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)

| hnical 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)<br>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                 |











# **Dyna-Star Hydraulic Pumps**

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

#### **Accessories**

#### **Drum Covers**



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

#### **Hydraulic Fluid Controls**

Required for each pump.

| n 29 | 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**











# 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)

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







# **Power-Star Hydraulic Pumps**

| Part Number | Description            |
|-------------|------------------------|
| 236754      | 1:1 Universal oil pump |

#### **Accessories**

# **Drum Covers**



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

# **Hydraulic Fluid Controls** Required for each pump.



| Part Number | Description  |
|-------------|--|
| 236865      | Power-Star fluid controls [1,500 psi (102 bar); 12 gpm (45.4 lpm)]. Includes manifold with pressure-reducing valve, flow-control valve, pressure gauge, shut-off ball valves, and 3 ft (0.9 m) supply and return hoses. Instruction manual 308395. |

# **Wall-Mounting Bracket**



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









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

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



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











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

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



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

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

All pumps come with suction tube and bung adapter.



| Package Number     | 114829                                | 226290                      |  |
|--------------------|---------------------------------------|-----------------------------|--|
| Type of Pump       | Lever <sup>(1)</sup>                  | Rotary <sup>(2)</sup>       |  |
| 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                      |  |

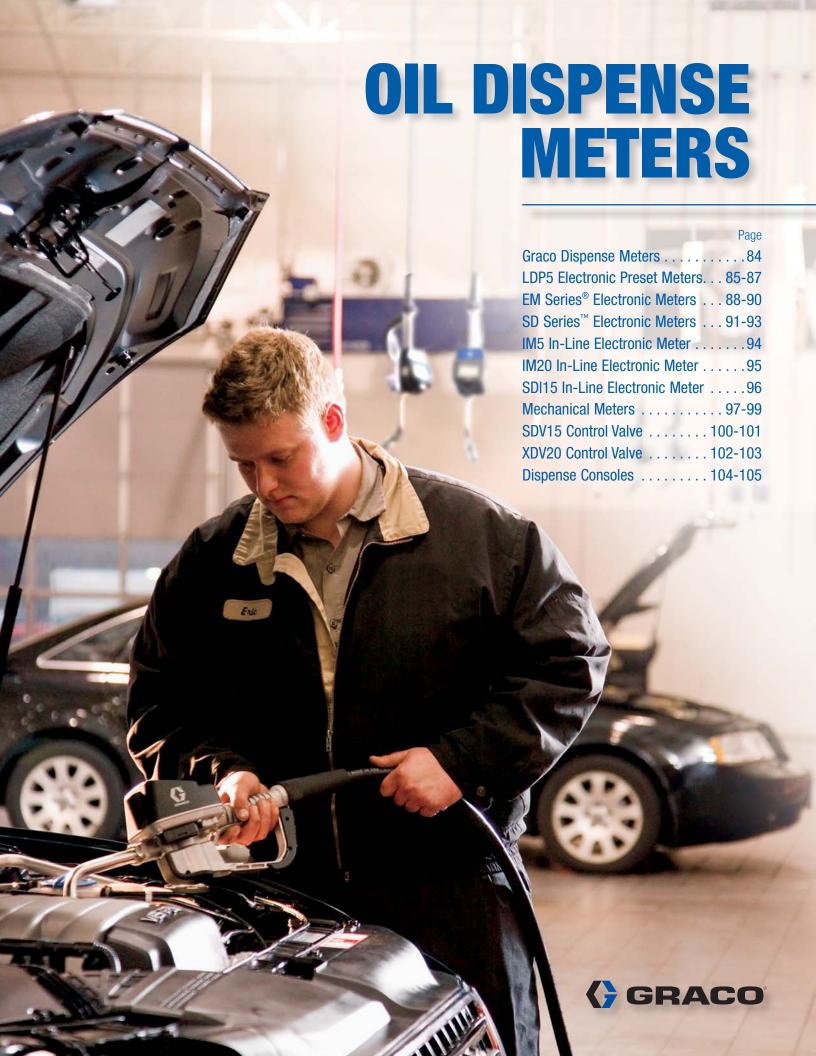
<sup>\*</sup>Drums not included.

<sup>1</sup> 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

<sup>2</sup> Package has adjustable 2 in NPT bung mounting to allow use with either 16 gal (60 l) or 55 gal (200 l) drum. Package includes bung adapter and spout outlet

| Notes |  |
|-------|--|
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# **Graco Dispense Meters**

|                               | Fluid  | Manual/<br>Preset | Maximum<br>Working Pressure | Maximum<br>Flow Rate | Intended Use                  | Warranty                                       | Reference<br>Pages |
|-------------------------------|--|-------------------|-----------------------------|----------------------|-------------------------------|--|--------------------|
| LDP5 Electronic Preset Meters | Petroleum- and synthetic-based oils (motor, gear and ATF)     Anti-freeze  | Preset            | 1,000 psi<br>(69 bar)       | 5 gpm<br>(19 lpm)    | Indoor                        | 5 years<br>overall<br>(2 years<br>electronics) | 77-79              |
| EM Series Electronic Meters   | Petroleum- and<br>synthetic-based oils<br>(motor, gear and ATF)     Anti-freeze  | Manual            | 1,500 psi<br>(103.4 bar)    | 20 gpm<br>(76 lpm)   | Indoor/<br>Outdoor            | 5 years<br>overall<br>(3 years<br>electronics) | 80-82              |
| SD Series Electronic Meters   | Petroleum- and<br>synthetic-based oils<br>(motor, gear and ATF)     Anti-freeze  | Manual/<br>Preset | 1,500 psi<br>(103.4 bar)    | 14 gpm<br>(53 lpm)   | Indoor/<br>Limited<br>Outdoor | 7 years<br>overall<br>(3 years<br>electronics) | 83-85              |
| IM5 In-Line Meters            | Petroleum- and synthetic-based oils (motor, gear and ATF) Anti-freeze Windshield wash fluid  | In-Line           | 500 psi<br>(34 bar)         | 5 gpm<br>(19 lpm)    | Indoor/<br>Outdoor            | 5 years<br>overall<br>(2 years<br>electronics) | 86                 |
| IM20 In-Line Meters           | Petroleum- and<br>synthetic-based oils<br>(motor, gear and ATF)     Anti-freeze  | In-Line           | 1,500 psi<br>(103.4 bar)    | 20 gpm<br>(76 lpm)   | Indoor/<br>Outdoor            | 5 years<br>overall<br>(3 years<br>electronics) | 87                 |
| SDI15 In-Line Meters          | <ul> <li>Petroleum- and<br/>synthetic-based oils<br/>(motor, gear and ATF)</li> <li>Anti-freeze</li> <li>Diesel exhaust fluid</li> </ul> | In-Line           | 1,500 psi<br>(103.4 bar)    | 15 gpm<br>(56.8 lpm) | Indoor                        | 7 years<br>overall<br>(3 years<br>electronics) | 88                 |
| Mechanical Meters             | Petroleum- and<br>synthetic-based oils<br>(motor, gear and ATF)     Anti-freeze  | Manual/<br>Preset | 1,500 psi<br>(103.4 bar)    | 8 gpm<br>(30 lpm)    | Indoor/<br>Outdoor            | 5 years  | 89-91              |
| SDV15 Control Valves          | Petroleum- and<br>synthetic-based oils<br>(motor, gear and ATF)     Anti-freeze  | N/A               | 1,500 psi<br>(103.4 bar)    | 15 gpm<br>(56.8 lpm) | Indoor/<br>Outdoor            | 7 years  | 92-93              |
| XDV20 Control Valves          | Petroleum- and synthetic-based oils (motor, gear and ATF)     Anti-freeze  | N/A               | 1,500 psi<br>(103.4 bar)    | 20 gpm<br>(76 lpm)   | Indoor/<br>Outdoor            | 7 years  | 94-95              |











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



Keeps dispenses precise.

## **Operator Controls**

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



Fluid Swivel

1/2 inch fluid inlet.



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

#### Rugged Meter Body

Superior impact resistance and long life.

#### Comfortable Handle

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

## Typical Applications

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

#### Typical Fluids Handled

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

| 100111 | iodi opooliiodiiolio |  |
|--------|----------------------|--|
| F      | low Range*           |  |

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

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



<sup>\*\*</sup>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.











# **LDP5 Electronic Preset Meters**

Automatic nozzle included

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

#### **Nozzle Extension Kits**

| Extension     | Fluid                     | Nozzle Description                | Part Number |
|---------------|---------------------------|-----------------------------------|-------------|
|               | Oil/Anti-freeze           | Automatic, thermally compensating | 239949      |
| Rigid         | 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      |
| INUZZIE UTIIY | Oil/Anti-freeze/Gear lube | Automatic                         | 238371      |













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

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

#### **Accessories**

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

# **Protective Boots with Trigger Guards**

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

#### **Swivel Covers**

|       | Part Number | Description |
|-------|-------------|-------------|
| GRACO | 191294      | Black       |
| GRAÇO | 191287      | Red         |
| GRAÇO | 191288      | Blue        |
| GRAÇO | 191289      | Green       |
| GEO.  | 191295      | Yellow      |

# **Hose Identification Wraps**

Vinyl hose wrap for easy identification of meter fluid.

|          | Part Number | Description |
|----------|-------------|-------------|
| () GRACO | 17S659      | Red         |
| O GRACO  | 17S660      | Blue        |
| O GRACO  | 17S661      | Green       |
| O GRACO  | 17S662      | Yellow      |
| O GRACO  | 17S663      | White       |

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











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

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

#### Twist-Close Nozzle Prevents Leaking

Multiple extensions available including rigid, flexible and gear lube.

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

Capable of up to 20 gpm.

#### Long Battery Life

Features upgraded electronics and easily replaceable AAA batteries.

#### **Prevent Accidental Dispenses**

Easy-to-hold locking handle.

## **Proven in Harsh Conditions**

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

#### Legacy Valve

1/2 and 3/4 inch inlets, compatible with oil, ATF, 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 p  | per DIN 40050-9                        |  |
| Battery                     | 2 (AAA) alkaline o  | or 2 (AAA) lithium                     |  |
| Wetted Parts                | Aluminum, stainless steel, carbon s                               | teel, acetal, nitrile rubber, Geolast™ |  |
| Meter Pressure Loss*        | 30 psi @ 6 gpm  | 85 psi @ 12 gpm                        |  |
| Dimensions                  | 13 in L x 3.5 in W x 5.25 in H (33 cm L x 9 cm W x 13.3 cm H)     |  |  |
| Weight                      | 3 lbs (1.36 kg)   | 3.1 lbs (1.39 kg)                      |  |
| Warranty                    | Five years overall, three years electronics and 1 year wear parts |  |  |
| Instruction Manual          | 3A5588  |  |  |

<sup>\*</sup> 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.











|      | Extension | Inlet in (mm) | Part Number |
|------|-----------|---------------|-------------|
|      | Flexible  |               | 25C904      |
| EM8  | Rigid     | 1/2 (13)      | 25C903      |
|      | Gear      |               | 25C905      |
|      | 5         | 1/2 (13)      | 25C915      |
| 20   | Flexible  | 3/4 (19)      | 25C918      |
| EM20 |           | 1/2 (13)      | 25C916      |
|      | Rigid     | 3/4 (19)      | 25C919      |

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

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











# >>> 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 |
|----------|-------------|-------------|
| () GRACO | 17\$659     | Red         |
| Q GRACO  | 17S660      | Blue        |
| O GRACO  | 17S661      | Green       |
| O GRACO  | 17S662      | Yellow      |
| O GRACO  | 17S663      | White       |

# **Nozzle and Extension Kits**

|    | Extension   | Fluid           | Nozzle Description          | Part Number | Compatible Meters |
|----|-------------|-----------------|-----------------------------|-------------|-------------------|
| 1  | Digid       | Oil             | Non-drip, manual open/close | 26C267      | EM8               |
|    | Rigid       | Oii             | Non-drip, quick-close       | 255921      | EM20              |
| 1  | Rigid       | Gear lube       | Non-drip, quick-close       | 255854      | EM8               |
| 1  | Flexible    | Oil             | Non-drip, manual open/close | 26C268      | EM8               |
|    | riexible    | UII             | 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              |
| 90 | Nozzle Only | Gear lube       | Non-drip, quick-close       | 255470      | EM8               |
| 4  | Flexible    | Oil/Anti-freeze | Extension only, 2 ft length | 131733      | EM8               |



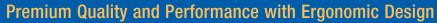












Graco's premium SD meters were designed from the ground up to provide the best user experience. These robust meters feature high flow, improved ergonomics and a large high-contrast LCD screen to make viewing dispense amounts easy in all lighting conditions.



GRACO

## Large LCD High-Contrast Display

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

#### Available in Two Models

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

#### **High Flow**

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

#### **Durable Cast Body**

Designed for heavy duty and harsh applications.

#### Automatic Quick-Close Nozzle

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

# Long-Life Valve Design

Cartridge design for fewer and easier repairs.

#### Ergonomic Handle Design

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

#### **Typical Applications**

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

#### Typical Fluids Handled

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

<sup>\*</sup>Tested in 10W motor oil. Flow rates vary with fluid pressure, temperature and viscosity.

<sup>\*\*</sup>At 2.5 gpm (9.5 lpm), at 70°F (21°C), with 10-weight oil and 1 gallon dispensed. May require calibration.
\*\*\*Battery required to meet life expectancy: Energizer® Alkaline E91.















# **SD Electronic Meters**





|       | Dispense<br>Type             | Flow Range<br>gpm (lpm) | Fluid           | Extension | Inlet in (NPT) | Part Number |        |
|-------|------------------------------|-------------------------|-----------------|-----------|----------------|-------------|--------|
|       |                              |                         | Oil             | Rigid     | 1/2            | 26C384      |        |
|       |                              |                         | Oii             | Flexible  | 1/2            | 26C354      |        |
| SDP8  | Preset<br>(Pulse FC-enabled) | 0.25–8<br>(1–30)        | Anti-freeze     | Rigid     | 1/2            | 26C385      |        |
|       | (i disc i s chasisa)         | (. 55)                  | Anti-freeze     | Flexible  | 1/2            | 26C355      |        |
|       |                              |                         | Gear lube       | Rigid     | 1/2            | 26C358      |        |
|       |                              |                         |                 | Flexible  | 1/2            | 26C357      |        |
| SDP18 | Preset                       | 0.25–18                 | Oil             | Flexible  | 3/4            | 26C361      |        |
| SD    | (Pulse FC-enabled)           | (1–68)                  | Oii             | Rigid     | 3/4            | 26C360      |        |
|       |                              |                         |                 | Rigid     | 1/2            | 26C356      |        |
|       |                              | 0.25–8                  | Oil             | Flexible  | 1/2            | 25M406      |        |
|       |                              |                         | Oii             | Rigid     | 1/2            | 25M404      |        |
| SD M8 | Manual                       |                         | 0.25–8          | 0.25-8    | Anti-Freeze    | Flexible    | 1/2    |
| SD    | iviariuai                    | (1–30)                  | Anti-Freeze     | Rigid     | 1/2            | 25M405      |        |
|       |                              |                         |                 | Gear Lube | Rigid          | 1/2         | 25M413 |
|       |                              |                         | Windshield Wash | Rigid     | 1/2            | 25M415      |        |
|       |                              |                         |                 | Flexible  | 3/4            | 25M417      |        |
| SDM18 | Manual                       | 0.25–18                 | Oil             | Rigid     | 3/4            | 25M416      |        |
| SDI   | Ivialiual                    | (1–68)                  |                 | Flexible  | 1/2            | 25M411      |        |
|       |                              |                         | Rigid           | 1/2       | 25M410         |             |        |

# **Nozzle and Extension Kits**

|            | Extension   | Fluid           | Nozzle Description               | Part Number | Compatible Meters |
|------------|-------------|-----------------|----------------------------------|-------------|-------------------|
|            |             | Oil             | Non-drip, quick-close            | 255852      | SDM8/SDP8         |
|            | Rigid       | Anti-freeze     | Non-drip, manual open/close      | 26C267      | SDM8/SDP8         |
| <b>**</b>  |             | Oil/Anti-freeze | High-flow, non-drip, quick-close | 255857      | SDM18/SDP18       |
| <b>N</b> . | Rigid       | Gear lube       | Non-drip, quick-close            | 255854      | SDM8/SDP8         |
|            |             | Oil             | Automatic, non-drip, quick-close | 255853      | SDM8/SDP8         |
|            | Flexible    | 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         |
| 4          | Nozzle Only | Gear lube       | Non-drip, quick-close            | 255470      | SDM8/SDP8         |
|            | Nozzle Only | Oil/Anti-freeze | Non-drip, manual open/close      | 17T207      | SDM8/SDP8         |
| 100        | Flexible    | Oil/Anti-freeze | Extension only, 2 ft length      | 131733      | SDM8/SDP8         |
|            | Rigid       | Windshield wash | Extension, nozzle                | 273079      | SDM8              |











# **Filter Kits for SD Series Meters**

| aller | Part Number | Description  |
|-------|-------------|--|
|       | 255885      | Kit includes filters/<br>strainers, spacers<br>and 0-rings |

#### **Swivel Covers**

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

# **Impact Protection**

|   | Part Number | Description         |
|---|-------------|---------------------|
| 8 | 131226      | Pulse/SD meter boot |

# **Hose Identification Wraps**

Vinyl hose wrap for easy identification of meter fluid.

|          | Part Number | Description |
|----------|-------------|-------------|
| () GRACO | 17S659      | Red         |
| Q GRACO  | 17S660      | Blue        |
| O GRACO  | 17S661      | Green       |
| OGRACO   | 17S662      | Yellow      |
| O GRACO  | 17S663      | White       |













#### 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**

dispense history.

- · 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

| echnical 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   |

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

# Ordering Information

#### Meter

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

#### **Accessory**

|   | Part Number | Description  |
|---|-------------|--------------|
| 0 | 239876      | Strainer kit |



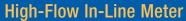
<sup>\*\*</sup>Display shows quantity in 0.01 increments up to 999.99 gallons, quarts, pints or liters. Totalizes in gallons or liters up to 99,999 units.











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



# Easy-to-Read LCD

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

#### Easy Battery Replacement

Long-lasting, replaceable AAA batteries.



#### Sealed Electronics

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

#### Tracks Totals in Two Modes

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

#### **Typical Applications**

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

#### Typical Fluids Handled

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

| Teci | ınıcaı | Specif | ications |
|------|--------|--------|----------|
|      |        |        |          |

| 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 |

















# 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.

# **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.

#### **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

| echnical 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  |

 $<sup>^\</sup>star\text{Tested}$  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) |













Ideal for indoor or outdoor use in all size shops.

# 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  |

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













# **Manual Meters**

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

# **Manual Meter Packages**

|   | Extension | Model Description | Part Number | Replacement<br>Nozzle/Extension Kit |
|---|-----------|-------------------|-------------|-------------------------------------|
|   | Flexible  | 4/16 Liter        | 24V043      | 255853                              |
|   | riexible  | 4/16 Quart        | 24V034      | 255853                              |
|   |           | 4/16 Liter        | 24V046      | 255852                              |
|   | Rigid     | 4/16 Quart        | 24V037      | 255852                              |
| 0 | Coor Lubo | 4/16 Liter        | 24V049      | 255854                              |
|   | Gear Lube | 4/16 Quart        | 24V040      | 255854                              |

# **Preset Meters**

|        | Extension | Model Description | Part Number |
|--------|-----------|-------------------|-------------|
|        |           | 60 Gallon         | 24U950      |
|        | Bare      | 60 Liter          | 24U953      |
| To all |           | 60 Quart          | 24U947      |













# **Preset Meter Packages**

|        | Extension Model |             | Part Number | Package Includes |
|--------|-----------------|-------------|-------------|------------------|
|        | Extension       | Description | Part Number | Nozzle Extension |
|        |                 | 60 Gallon   | 24Z129      | 255853           |
|        | Flexible        | 60 Liter    | 24Z132      | 255853           |
| 60/1   |                 | 60 Quart    | 24Z126      | 255853           |
|        | Rigid           | 60 Gallon   | 24Z128      | 255852           |
|        |                 | 60 Liter    | 24Z131      | 255852           |
| 6      |                 | 60 Quart    | 24Z125      | 255852           |
|        |                 | 60 Gallon   | 24V055      | 24W641           |
|        | Short Rigid     | 60 Liter    | 24V058      | 24W641           |
| To the |                 | 60 Quart    | 24V052      | 24W641           |
|        | Gear Lube       | 60 Gallon   | 24Z130      | 255854           |
|        |                 | 60 Liter    | 24Z133      | 255854           |
| 15 1   |                 | 60 Quart    | 24Z127      | 255854           |

# **Nozzle Extensions**

|   | Fluid       | Extension   | Compatible Meter | Part Number |
|---|-------------|-------------|------------------|-------------|
|   |             | Flexible    | Manual           | 255853      |
| - | Oil         | Rigid       | Manual           | 255852      |
|   |             | Short Rigid | Preset           | 24W641      |
|   | Anti-freeze | Flexible    | Manual/Preset    | 24W306      |
|   | Anu-neeze   | Rigid       | Manual/Preset    | 255855      |
|   | Gear lube   | Rigid       | Manual           | 255854      |

# **Accessories**

| <br>Part Number | Description                  |
|-----------------|------------------------------|
| 256164          | Strainer filter kit, 10-pack |













# For Standard and Heavier-Duty Applications

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

#### Fluid Extension Kits

Choose from rigid or flexible extensions 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.

#### 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

| 15 gpm (56.8 lpm)  |
|--|
| 1,500 psi (103 bar)  |
| 1/2 in NPT   |
| 3/4-16 straight thread O-ring boss                               |
| -40°F to 180°F (-40°C to 82°C)                                   |
| Yes  |
| Aluminum, SST, CS, acetal, nitrile rubber, tpe                   |
| 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) |
| 0.4 lb (0.18 kg)   |
| Seven years  |
| 312789   |
|  |

 $<sup>{}^{\</sup>star}\text{Tested in 10W oil at }70^{\circ}\text{F. Flow rates vary with fluid pressure, temperature, viscosity, inlet fitting and nozzle type.}$ 













#### **SDV15 Control Valve**

|     | Fluid       | Extension | Inlet in (mm) | Part Number |
|-----|-------------|-----------|---------------|-------------|
|     | Oil         | Rigid     |               | 247712      |
| · M | OII         | Flexible  |               | 247713      |
|     | Anti-france | Rigid     | 1/2 (13)      | 247715      |
| A   | Anti-freeze | Flexible  |               | 247716      |
|     | Gear        | Gear      |               | 247714      |

# **SDV15 Bare Control Valve**

|     | Inlet in (mm) | Part Number |
|-----|---------------|-------------|
| 0 8 | 1/2 (13)      | 247717      |

# **Quick Close Nozzles with Extension**

| Extension | Part Number |
|-----------|-------------|
| Rigid     | 255857      |
| Flexible  | 255858      |

# **Filter Kit**

|   | Description         | Part Number |
|---|---------------------|-------------|
| 0 | Strainer filter kit | 256164      |

# **Quick Close Nozzle**

Extension sold separately.

|    | Fluid                          | Part Number |
|----|--------------------------------|-------------|
| F  | Oil                            | 17R220      |
|    | Anti-freeze                    | 255460      |
| 90 | Gear lube                      | 255470      |
|    | Oil/Anti-freeze<br>(high-flow) | 255461      |









# For Standard and Heavier-Duty Applications

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



#### Fluid Extension Kits

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

#### Lock-On/Lock-Off Trigger

For hands-free operation.

#### Sturdy Cast Body

Designed for use in tough environments.

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

Meets standard and high flow requirements.

#### **Typical Applications**

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

#### Typical Fluids Handled

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

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













# **XDV20 Control Valve**

Includes high flow, quick-close nozzle.

|   | Extension | Inlet in (mm) | Part Number |  |
|---|-----------|---------------|-------------|--|
|   | Digid     | 1/2 (13)      | 247718      |  |
|   | Rigid     | 3/4 (19)      | 247722      |  |
|   | Florible  | 1/2 (13)      | 247721      |  |
| A | Flexible  | 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)       |
| 4 | 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.

| ATTT-                      | Part Number          | Description                | Package Includes              |                          |  |  |
|----------------------------|----------------------|----------------------------|-------------------------------|--------------------------|--|--|
| 18888                      | Fait Nulliber        | Description                | Dispense Valve Brackets (qty) | Water Bib Brackets (qty) |  |  |
| 222629<br>223448<br>222645 | Six-station console  | 196471 (5)                 | 110236 (1)                    |                          |  |  |
|                            | Four-station console | 196471 (3)                 | 110236 (1)                    |                          |  |  |
|                            | 222645               | Single add-on fluid module | 196471 (1)                    | -                        |  |  |

#### **Lubricant Dispense Consoles Accessories**

| abilitalit Dispelise oblisoles Accessories |             |  |  |  |  |
|--|-------------|--|--|--|--|
|  | Part Number | Description  |  |  |  |
|  | 110236      | Water bib bracket                                    |  |  |  |
|  | 110237      | Dispense valve bracket for XD meters                 |  |  |  |
| 1  | 110285      | Pistol-grip dispense valve bracket                   |  |  |  |
| 4  | 196471      | Dispense valve bracket for LDP5, EM8 and EM20 meters |  |  |  |
|  | 249440      | Dispense valve bracket for SD/Matrix meters          |  |  |  |

# Oil Dispense Bar

| 7 18 | 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.   |
| Consultation of the second | 239706      | Meter kit for adding IM5 electronic totalizing meter to dispense valve. Reads in gallons, quarts, pints and liters. |



| Notes |  |
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# GREASE PUMPS

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() GRACO

# **Grease Pump Selection Guide**

| Pump Family and<br>Fluid Pressure Ratio | Typical Applications  | Annual<br>Usage                | Line<br>Length          | Simultaneous<br>Dispense<br>Points | Approx.<br>Free Flow<br>Rate @ 100 psi | Air<br>Inlet  | Fluid<br>Outlet | Air Operation<br>Range        | Reference<br>Page             |
|---|---|--------------------------------|-------------------------|------------------------------------|--|---------------|-----------------|-------------------------------|-------------------------------|
| LD, 50:1                                | Automotive dealerships     Fast lube centers     Lube trucks     Lubricant transfer     Service shops   | Up to 7,000 lbs<br>(3,175 kg)  | Up to 100<br>(30.5 m)   | 1                                  | 4.5 lbs/min<br>(2 kg/min)              | 1/4 in NPT(F) | 1/4 in NPT(F)   | 20-150 psi<br>(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<br>(4,535 kg) | Up to 100<br>(30.5 m)   | 1                                  | 1.5 lbs/min<br>(0.7 kg/min)            | 3/8 in NPT(F) | 1/4 in NPT(F)   | 40-140 psi<br>(2.8-10 bar)    | 117-120<br>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<br>(4,535 kg) | Up to 250 ft<br>(76 m)  | 1-2                                | 7.5 lbs/min<br>(3.4 kg/min)            | 3/8 in NPT(F) | 1/4 in NPT(F)   | 40-180 psi<br>(2.8-12.5 bar)  | 121-123<br>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<br>(4,535 kg) | Up to 250 ft<br>(76 m)  | 1-2                                | 7.5 lbs/min<br>(3.4 kg/min)            | 3/8 in NPT(F) | 1/4 in NPT(F)   | 30-140 psi<br>(2.1-9.7 bar)   | 121-132<br>124-128<br>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<br>(9,072 kg)     | Up to 500 ft<br>(152 m) | 4 or more                          | 29 lbs/min<br>(13.1 kg/min)            | 1/2 in NPT(F) | 1 in NPT(F)     | 40-180 psi<br>(2.8-12.5 bar)  | 129-130<br>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<br>(9,072 kg)     | Up to 250 ft<br>(76 m)  | 4 or more                          | 9 lbs/min<br>(4.1 kg/min)              | 1/2 in NPT(F) | 3/8 in NPT(F)   | 40-150 psi<br>(2.8-10.3 bar)  | 129-131<br>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<br>(9,072 kg)     | Up to 500 ft<br>(152 m) | 4 or more                          | 6.5 lbs/min<br>(2.9 kg/min)            | 1/2 in NPT(F) | 3/8 in NPT(F)   | 40-100psi<br>(2.8-7 bar)      | 129-130<br>132-139            |
| GT 750, 36:1                            | Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Mining   | > 20,000 lbs<br>(9,072 kg)     | Up to 250 ft<br>(76 m)  | 4 or more                          | 32 lbs/min<br>(14.5 kg/min)            | 1/2 in NPT(F) | 1 in NPT(F)     | 40-100psi<br>(2.8-7 bar)      | 140-141                       |

# **Grease Pump Selection Guide**

| Pump Family and<br>Fluid Pressure Ratio  | Typical Applications  | Annual<br>Usage            | Air<br>Inlet  | Fluid<br>Outlet | Air Operation<br>Range  | Reference<br>Page  |
|--|---|----------------------------|---------------|-----------------|-------------------------|--------------------|
| Check-Mate 14:1  | Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill |                            | 3/4 in NPT(F) | 1-1/2 in NPT(M) | 0-100 psi<br>(0-7 bar)  | 142-143<br>145-146 |
| Check-Mate 26:1  | Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill | > 20,000 lbs<br>(9,072 kg) | 3/4 NPT(F)    | 1-1/2 in NPT(M) | 0-100 psi<br>(0-7 bar)  | 142-143<br>146     |
| Check-Mate 29:1  | Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill | > 20,000 lbs<br>(9,072 kg) | 3/4 NPT(F)    | 1 in NPT(F)     | 0-100 psi<br>(0-7 bar)  | 142-143<br>146     |
| Check-Mate 55:1  | Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill | > 20,000 lbs<br>(9,072 kg) | 3/4 NPT(F)    | 1 in NPT(F)     | 0-100 psi<br>(0-7 bar)  | 142<br>144-14(     |
| Check-Mate 63:1  | Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill | > 20,000 lbs<br>(9,072 kg) | 3/4 NPT(F)    | 3/4 in NPT(M)   | 0-72 psi<br>(0-4.9 bar) | 142<br>144-146     |
| Check-Mate 68:1  • Fleet service facilities • In-plant large runs • Large volume lubricant transfer • Mining remote fill |   | > 20,000 lbs<br>(9,072 kg) | 3/4 NPT(F)    | 1 in NPT(F)     | 0-78 psi<br>(0-5.4 bar) | 142<br>144-146     |

| Pump Family and<br>Fluid Pressure Ratio | Typical Applications   | Maximum Grease<br>Output Flow Rate | Maximum Grease<br>Output Pressure | Hydraulic<br>Inlet (Supply)   | Hydraulic<br>Outlet (Return) | Grease Outlet   | Maximum<br>Hydraulic Inlet<br>Pressure | Reference<br>Page |
|---|--|------------------------------------|-----------------------------------|-------------------------------|------------------------------|-----------------|--|-------------------|
| Dyna-Star 5:1                           | Fleet service facilities Heavy-duty dealerships In-plant Lube trucks Lubricant transfer Mining Service shops | 4 lb/min<br>(1.8 kg/min)           | 7500 psi<br>(517 bar)             | 3/8 in NPT(F)                 | 3/4 in NPT(F)                | 1/2 in NPT(F)   | 1500 psi<br>(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<br>(0.5 kg/min)         | 7500 psi<br>(517 bar)             | 3/4 in -16 JIC<br>(37° Flare) | 3/4 in NPT(F)                | 1/2 in NPT(F)   | 600 psi<br>(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<br>(20.4 kg/min)         | 2300 psi<br>(159 bar)             | 3/4 in NPT(F)                 | 1 in NPT(F)                  | 1-1/2 in NPT(F) | 1500 psi<br>(102 bar)                  | 149-150           |







**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**

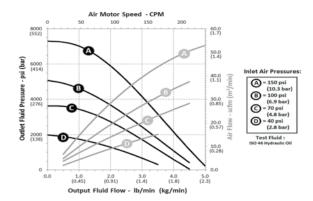
- Automotive dealerships
- · Fast lube centers
- Service shops
- Lube trucks

### Typical Fluids Handled

• Grease up to NLGI #2

### **Pump Performance**

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





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

# **LD Series 50:1 Pumps**

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



# **>>**

### Ordering Information

# 35 lb Grease Packages





### 120 lb Grease Packages



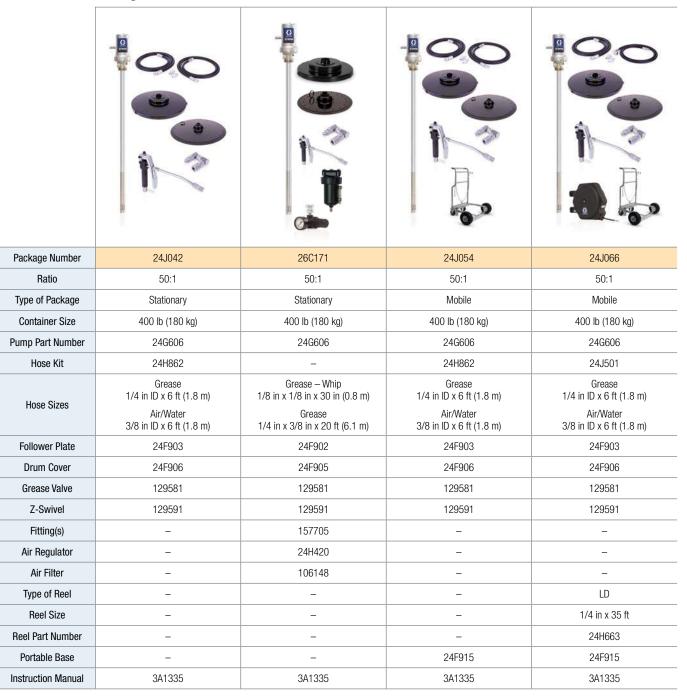




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### Ordering Information

### **400 lb Grease Packages**





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



| Technical Specifications |   |                                |
|--------------------------|---|--------------------------------|
| Pressure                 |   | 7,500 psi (517 bar / 51.7 MPa) |
| Wetted Part              | 3 | 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



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



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



# >>> Ordering Information

# **Adjustable Bung Adapter**

| Part Number | Description                          |
|-------------|--------------------------------------|
| 24P623      | Adjustable bung adapter for LD pumps |

# **Air Regulators**

| 106 | Part Number | Description  |
|-----|-------------|--|
|     | 24H420      | Mini self-relieving air regulator with gauge, 1/4 in NPT x 3/8 in npsm |

# **Carts**

| 7  | Part Number | Description  |
|----|-------------|--|
| N. | 24H422      | Drum cart with pneumatic wheels for 120 lb drums; includes chain for securing drum to cart |
| 0  | 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**

| SP3 | 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**

| 89 | 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    |  |          |               |         |
|----|-------------|------------------------------|-------------|--|----------|---------------|---------|
|    | Fait Number |                              | Grease Hose | Grease Hose Size   | Air Hose | Air Hose Size | Fitting |
| 00 | 24H862      | 6 ft LD grease pump hose kit | 24H606      | 1/4 in NPT(M) x<br>1/4 in NPT(M) x 6 ft                      | 24H858   | 3/8 in x 6 ft | 156823  |
| 90 | 24J501      | 6 ft LD grease pump hose kit | 24J487      | 1/4 in NPT(M) x<br>1/4 in NPT(M) (with<br>90° swivel) x 6 ft | 24H858   | 3/8 in x 6 ft | 156823  |







# Perfect for Medium Pressure, Low Volume Applications

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

### **Durable Casting**

Thick cast aluminum air motor housing offers unmatched durability.

### Fewer Repairs

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

### Extended Seal Life

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

### Superior Sealing

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

### Corrosion-Resistant

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

### **Typical Applications**

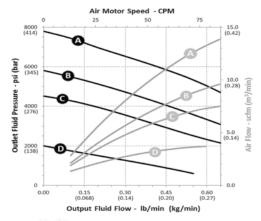
- · Automotive dealerships
- · Fast lube centers
- Service shops
- Heavy-duty dealerships
- · Fleet services facilities
- In-plant
- · Lube trucks
- Mining

### Typical Fluids Handled

• Grease up to NLGI #2

### **Pump Performance**

### Mini Fire-Ball 225 Pumps







# Mini Fire-Ball® 225 Grease Pumps



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

# >>> Ordering Information

# Mini Fire-Ball 50:1 Pumps

| Part Number | Description                            |  |
|-------------|--|--|
| 246909      | For 35 lb (16 kg) pail                 |  |
| 253361      | For 35 lb (16 kg) pail, without handle |  |
| 246780      | For 120 lb (55 kg) drum                |  |
| 246781      | For 400 lb (180 kg) drum               |  |





# 35 lb and 50 lb Grease Packages



| P               | ackage 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                          |
| Pu              | ımp Part Number  | 246909                          | 246909                          | 246909                          |
| I               | Fluid Hose Size  | 1/4 in x 12 ft                  | 1/4 in x 12 ft                  | 1/4 in x 12 ft                  |
| D               | ispense Hose Kit | 236058                          | 236058                          | 236058                          |
| səc             | 12 ft Hose       | 109151                          | 109151                          | 109151                          |
| Kit Includes    | Air Coupler      | 114558                          | 114558                          | 114558                          |
|                 | Air Fitting      | 169971                          | 169971                          | 169971                          |
| Dispense        | Z-Swivel         | 202577                          | 202577                          | 202577                          |
| Dis             | Pro-Shot Valve   | 242056                          | 242056                          | 242056                          |
|                 | Follower Plate   | 24F901                          | **                              | **                              |
|                 | Drum Cover       | 222059                          | 24R350                          | 24R350                          |
|                 | Portable Base    | -                               | -                               | 203650                          |
| In              | struction Manual | 309967                          | 309967                          | 309967                          |
|                 | CE Package       | 253384                          | 255385                          | 255386                          |



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



# 120 lb and 400 lb Grease Packages



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





# Ideal for Shops with Grease Transfer

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

### Durable

Thick cast aluminum air motor housing offers unmatched durability.

### Fewer Repairs

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

### Extended Seal Life

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

### Superior Sealing

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

### Corrosion-Resistant

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

### **Typical Applications**

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

### Typical Fluids Handled

· Grease up to NLGI #2

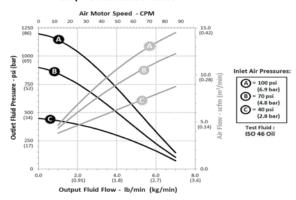




# Pump Performance

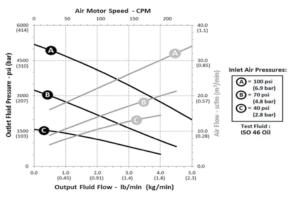
### Fire-Ball 300 15:1 Pumps

### **Pump Performance Curve**



### Fire-Ball 300 50:1 Pumps

### **Pump Performance Curve**



| <u> </u>  |   |  |
|---|---|--|
|   | 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/mi                           |
| 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,<br>PTFE, nitrile rubber, leather | Steel, brass, aluminum, acetal, nitrile rubber, polyurethane |
| Sound Pressure Level                            | 77.8 dB(A)  | 77.8 dB(A)   |
| Sound Power Level                               | 85.6 dB(A)  | 85.6 dB(A)   |
| Approximate Weight                              | 22 lb (10 kg)   | 22 lb (10 kg)  |
| Instruction Manual                              | 306531  | 308883   |

# Ordering Information

### Fire-Ball 300 Grease Pumps

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





# **15:1 Grease Pump Packages**



| Package Number        |                          | 222078                    | 220170                    | 220171                       |
|-----------------------|--------------------------|---------------------------|---------------------------|------------------------------|
| Т                     | ype of Package           | Stationary Pail Dispenser | Stationary Drum Dispenser | Cover-Mounted Drum Dispenser |
| Ratio                 |                          | 15:1                      | 15:1                      | 15:1                         |
|                       | Container Size           | 35 lb (16 kg)             | 120 lb (55 kg)            | 400 lb (180 kg)              |
| Pu                    | ımp Part Number          | 206405                    | 206699                    | 206700                       |
|                       | Dispense Kit             | 222080                    | 222081                    | 222081                       |
|                       | Fluid Hose               | 1/4 in x 15 ft            | 1/4 in x 25 ft            | 1/4 in x 25 ft               |
|                       | Hose Part<br>Number      | 109165                    | 109167                    | 109167                       |
|                       | Air Coupler              | 110198                    | 110198                    | 110198                       |
| SS                    | Air Fitting              | _                         | 169971                    | 169971                       |
| Dispense Kit Includes | Closed Nipple            | 156849                    | 156849                    | 156849                       |
| Kit                   | Z-Swivel                 | 202577                    | 202577                    | 202577                       |
| ense                  | Fitting(s)               | 169971                    | _                         | _                            |
| Disp                  | Dispenser                | Pro-Shot                  | Pro-Shot                  | Pro-Shot                     |
|                       | Dispenser Part<br>Number | 242056                    | 242056                    | 242056                       |
|                       | Air Regulator            | 110234                    | 110234                    | 110234                       |
|                       | Air Pressure<br>Gauge    | 100960                    | 100960                    | 100960                       |
|                       | Drum Cover               | 222058                    | 204574                    | 200326                       |
| Ins                   | struction Manual         | 307882                    | 307882                    | 307882                       |
|                       | CE Package               | 241043                    | 241044                    | 241045                       |



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### Ordering Information

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



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



### 50:1 120 lb Grease Pump Packages







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



|   | Package Number                         |                          | 225014*           | 222073*                           |
|---|--|--------------------------|-------------------|-----------------------------------|
|   | Type of Package  Ratio  Container Size |                          | Stationary supply | Stationary supply topper-inductor |
|   |  |                          | 50:1              | 50:1                              |
|   |  |                          | 120 lb (55 kg)    | 120 lb (55 kg)                    |
|   | Pι                                     | ımp Part Number          | 239887            | 239887                            |
|   |  | Dispense Kits            | 222072            | _                                 |
|   |  | Fluid Hose               | 1/4 in x 6 ft     | -                                 |
|   |  | Hose Part Number         | 109150            | _                                 |
|   | SS                                     | 6 ft Coupled Hose        | 203320            | -                                 |
|   | Dispense Kit Includes                  | Air Coupler              | _                 | -                                 |
|   | Kit<br>I                               | Air Fitting              | -                 | -                                 |
|   | ense                                   | Z-swivel                 | -                 | -                                 |
|   | Dispe                                  | Fitting(s)               | 155494/155541     | -                                 |
|   |  | Dispenser                | -                 | -                                 |
|   |  | Dispenser Part<br>Number | -                 | -                                 |
|   |  | Fluid Hose Size          | See kit above     | -                                 |
| ĺ |  | Air Hose Size            | See kit above     | -                                 |
|   |  | Follower Plate           | 24F902            | -                                 |
| ĺ |  | Drum Cover               | 24R350            | -                                 |
|   | Holster                                |                          | _                 | -                                 |
| ĺ | Portable Base                          | Portable Base            | -                 | -                                 |
| ĺ | Elevator                               |                          | -                 | 204121                            |
|   |  | Pump Support             | -                 | 222074                            |
|   |  | Hold Down Kit            | -                 | -                                 |
|   | ln                                     | struction Manual         | 307880            | 306523                            |
| Ì |  | CE Package               | 241034            | _                                 |

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

# 50:1 400 lb Grease Pump Packages



| Р                     | ackage Number       | 225016*           | 226013*                           |
|-----------------------|---------------------|-------------------|-----------------------------------|
| Type of Package       |                     | Stationary supply | Stationary supply topper-inductor |
| Ratio                 |                     | 50:1              | 50:1                              |
|                       | Container Size      | 400 lb (180 kg)   | 400 lb (180 kg)                   |
| Pι                    | ımp Part Number     | 239888            | 239888                            |
| Но                    | se and Fitting Kits | 222072            | 204467                            |
| səpn                  | Fluid Hose          | 1/4 in x 6 ft     | 1/4 in x 6 ft                     |
| Dispense Kit Includes | Hose Part Number    | 109150            | 109150                            |
| ense k                | 6 ft Coupled Hose   | 203320            | _                                 |
| Disp                  | 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                            |
| ln                    | struction Manual    | 307880            | 306556                            |
|                       | CE Package          | 241035            | -                                 |

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



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

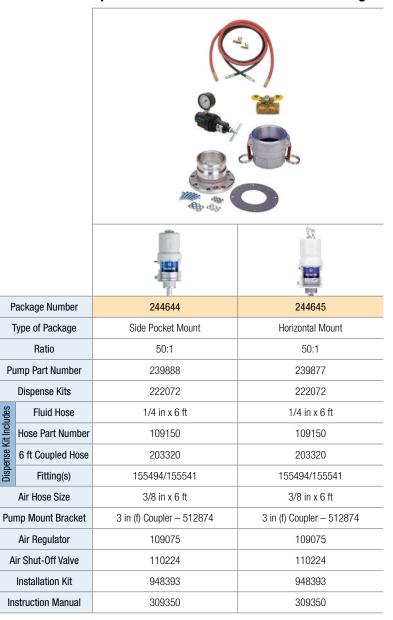


| F            | ackage Number     | 222085*        | 222071*         |
|--------------|-------------------|----------------|-----------------|
|              | Type of Package   | Lube truck     | Lube truck      |
|              | Ratio             | 50:1           | 50:1            |
|              | Container Size    | 120 lb (55 kg) | 400 lb (180 kg) |
| Pı           | ump Part Number   | 239887         | 239888          |
|              | Dispense Kits     | 222072         | 222072          |
| səpr         | Fluid Hose        | 1/4 in x 6 ft  | 1/4 in x 6 ft   |
| Kit Includes | Hose Part Number  | 109150         | 109150          |
| Dispense K   | 6 ft Coupled Hose | 203320         | 203320          |
| Dispe        | Fitting(s)        | 155494/155541  | 155494/155541   |
|              | Air Hose Size     | 3/8 in x 6 ft  | 3/8 in x 6 ft   |
|              | Follower Plate    | 220654         | 223845          |
|              | Drum Cover        | 222060         | 207366          |
|              | Hold Down Kit     | 222061         | 207361          |
| In           | struction Manual  | 307880         | 307880          |
|              | CE Package        | 241036         | 241037          |

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



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







# The Pump of Choice for Your Most Demanding Applications!

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



Thick cast aluminum air motor housing offers unmatched durability.

### Fewer Repairs

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

### Extended Seal Life

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

## Superior Sealing

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

### Corrosion-Resistant

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

### **Typical Applications**

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

### Typical Fluids Handled

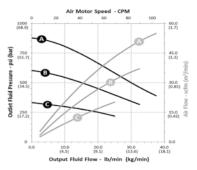
• Grease up to NLGI #2





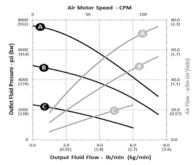
### **Pump Performance**

### Fire-Ball 425 10:1 Pumps



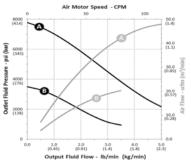


### Fire-Ball 425 50:1 Pumps





### Fire-Ball 425 75:1 Pumps





|  | 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<br>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/mi   |
| 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 ba |
| 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,<br>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           |  |  |

<sup>\*</sup>Includes 2 in NPT Bung Adapter (part number 222308).



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



| P                     | Package Number 223108* |                   | 225781*           | 226018*                           |  |
|-----------------------|------------------------|-------------------|-------------------|-----------------------------------|--|
| 1                     | 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)                   |  |
| Pι                    | ump Part Number        | 205394            | 205395            | 205395                            |  |
|                       | Dispense Kits          | 222076            | 222076            | 205102                            |  |
| səpn                  | Fluid Hose             | 3/8 in x 6 ft     | 3/8 in x 6 ft     | 3/8 in x 6 ft                     |  |
| Dispense Kit Includes | Hose Part Number       | 109163            | 109163            | 109163                            |  |
| ense k                | 6 ft Coupled Hose      | 205418            | 205418            | -                                 |  |
| Dispe                 | Fitting(s)             | 155470/155494     | 155470/155494     | 156859/196220/205528              |  |
|                       | Air Hose Size          | 1/2 in x 6 ft     | 1/2 in x 6 ft     | 1/2 in x 6 ft                     |  |
|                       | Drum Cover             | 204574            | 200326            | _                                 |  |
|                       | Follower Plate         | 223344            | 223846            | -                                 |  |
|                       | Pump Support           | -                 | -                 | 204461                            |  |
|                       | Elevator               | -                 | -                 | 204385                            |  |
|                       | Inductor Plate         | -                 | -                 | 205699                            |  |
|                       | Base                   | -                 | -                 | 205339                            |  |
| In                    | struction Manual       | 307880            | 307880            | 306556                            |  |
|                       | CE Package             | 241039            | 241040            | -                                 |  |

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



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



| Package Number                   |                   | 244635*                | 244636*                | 244637*              |  |
|----------------------------------|-------------------|------------------------|------------------------|----------------------|--|
| Type of Package                  |                   | Stationary Cover-Mount | Stationary Cover-Mount | Stationary Inductor  |  |
|                                  | Ratio             | 75:1                   | 75:1                   | 75:1                 |  |
| Container Size  Pump Part Number |                   | 120 lb (55 kg)         | 400 lb (180 kg)        | 400 lb (180 kg)      |  |
|                                  |                   | 239729                 | 239730                 | 239730               |  |
|                                  | Dispense Kits     | 222076                 | 222076                 | 205102               |  |
| səpr                             | Fluid Hose        | 3/8 in x 6 ft          | 3/8 in x 6 ft          | 3/8 in x 6 ft        |  |
| Kit Includes                     | Hose Part Number  | 109163                 | 109163                 | 109163               |  |
| Dispense K                       | 6 ft Coupled Hose | 205418                 | 205418                 | -                    |  |
| Dispe                            | Fitting(s)        | 155470/155494          | 155470/155494          | 156859/196220/205528 |  |
| Air Hose Size                    |                   | 1/2 in x 6 ft          | 1/2 in x 6 ft          | 1/2 in x 6 ft        |  |
|                                  | Drum Cover        | 204574                 | 200326                 | -                    |  |
|                                  | Follower Plate    | 223344                 | 223846                 | -                    |  |
|                                  | Pump Support      | -                      | -                      | 204461               |  |
| Elevator                         |                   | -                      | -                      | 204385               |  |
| Inductor Plate<br>Base           |                   | -                      | -                      | 205699               |  |
|                                  |                   | -                      | -                      | 205339               |  |
| In                               | struction Manual  | 307880                 | 307880                 | 306556               |  |
|                                  | CE Package        | 24M271                 | 24M272                 | _                    |  |

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



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



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

 $<sup>^{\</sup>star\star}\text{Use}$  3/8 in (9.5 mm) air regulator (109075); must be ordered separately.



# **Grease Pump RAM Packages**



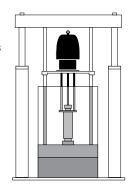


|                       |                           | Part 257435 (Ram Assembly) not shown | Part 257435 (Ram Assembly) not shown |  |
|-----------------------|---------------------------|--------------------------------------|--------------------------------------|--|
| P                     | ackage Number             | 244905                               | 244906                               |  |
| 1                     | Type of Package           | Stationary Ram                       | Stationary Ram                       |  |
|                       | Ratio                     | 50:1                                 | 75:1                                 |  |
|                       | Container Size            | 400 lb (180 kg)                      | 400 lb (180 kg)                      |  |
| Pı                    | ump Part Number           | Fire-Ball 425 – 205395               | Fire-Ball 425 – 239730               |  |
|                       | Dispense Kits 222076      |                                      | 222076                               |  |
| ndes                  | Fluid Hose                | 3/8 in x 6 ft                        | 3/8 in x 6 ft                        |  |
| Dispense Kit Includes | Hose Part Number          | 109163                               | 109163                               |  |
| ense k                | 6 ft Coupled Hose         | 205418                               | 205418                               |  |
| Dispe                 | Fitting(s)                | 155470/155494                        | 155470/155494                        |  |
|                       | Air Hose Size             | 1/2 in x 6 ft                        | 1/2 in x 6 ft                        |  |
|                       | Ram                       | 257435                               | 257435                               |  |
|                       | Adapter Kit               | 224266                               | 224266                               |  |
|                       | Air Regulator * and Gauge |                                      | 244844                               |  |
| R                     | am Plate Seal Kit         | 247335                               | 247335                               |  |
| I                     | Pump Mount Kit            | 247337                               | 247337                               |  |
| In                    | struction Manual          | 309345                               | 309345                               |  |
|                       | CE Package                | 257589                               | -                                    |  |

<sup>\*</sup>Air gauge included with RAM controller.

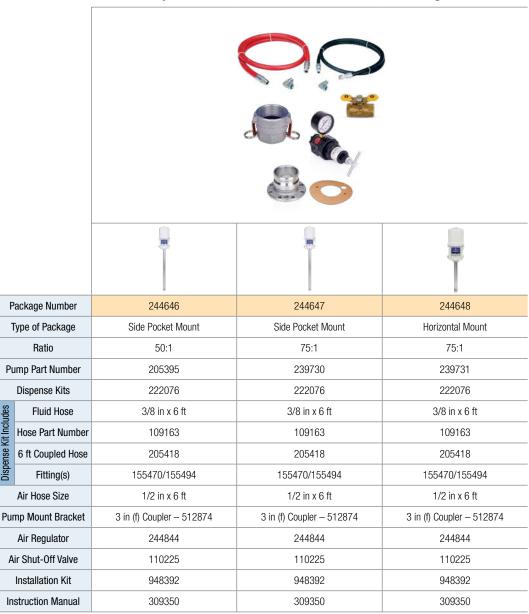
### RAM-Mount

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





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







# **Air Regulators**

| Sand Sand |
|-----------|
|-----------|

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

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



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

# **Bung Adapters**



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

# **Dispense Hose and Fitting Kits**



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

# **Hose and Fitting Kits**



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



# **Drum Covers**

| Part Number | Description   | Compatible Pumps   |
|-------------|---|--|
| 222059      | Cover for 35 lb (16 kg) pails   | Mini Fire-Ball 225, 50:1<br>Fire-Ball 300, 50:1  |
| 24R350      | LD Cover for open-head 35 lb (16 kg), 70 lb (32 kg) or<br>120 lb (55 kg) drums        | Mini Fire-Ball 225, 50:1<br>Fire-Ball Pumps  |
| 204574      | SD Cover for open-head 70 lb (32 kg) or 120 lb (55 kg)                                | Mini Fire-Ball 225, 50:1<br>Fire-Ball Pumps  |
| 200326      | Cover for open-head 400 lb (180 kg) drums   | Mini Fire-Ball 225, 50:1<br>Fire-Ball 300, 15:1<br>Fire-Ball 300, 50:1<br>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**

| <br>Part Number | Description  | Includes      |               |                 |
|-----------------|--|---------------|---------------|-----------------|
| Fait Number     |  | Cover Support | Drum Elevator | Air Control Kit |
| 241663          | Air-powered elevator to speed up 400 lb (180 kg)<br>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 |
| 8 | 512874      | Coupler (female), 3 in thread                 |





### **Follower Plates**



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

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

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

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





# **Portable Bases**

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

### **Carts**

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

# **Pro-Shot Dispense Valves**



| Part Number   | Description  |  |
|---|--|--|
| 242055  | 1/4 in NPT(F) inlet without coupler or extension           |  |
| 242056  | 2056 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  |
|----|-------------|--|
| 75 | 202577      | Z-Swivel allows non-binding movement for hard-to-reach locations, 1/4-18 NPT |



# **Fewer Strokes and Longer Pump Life**

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



### Efficient Air Motor

Use less air to move more grease.

### High Flow Rates

Up to 32 lb/min of grease.

### High Volume Per Stroke

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

# Proven Pump Technology

Based on Graco  $\mathsf{NXT}^{^\mathsf{TM}}$  pump technology.

### Multiple Tank Options

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

### **Typical Applications**

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

### Typical Fluids Handled

• Grease up to NLGI #2

| nnical Specifications   |   |
|---|---|
| Fluid Pressure Ratio  | 36:1  |
| Air Pressure Operating Range                                      | 40-100 psi (3-7 bar)                                  |
| Maximum Working Pressure  | 3600 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<br>1 year wear parts           |
| Instruction Manual  | 3A5363  |





# Pump Performance Air Motor Speed - CPM 25 50 75 100 (228) (23) (24) (25) (24) (25) (25) (25) (26) (28) (28) (28) (29) (28)



# GT 750 36:1 Grease Pumps

| 0 | 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 |

### **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<sup>™</sup> 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<sup>™</sup> control gives you pump diagnostics, material usage tracking and pump runaway protection.

### **NXT Air Motor**

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

### Modular Air Valves

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

### Integrated Air Controls

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

### Piston Valve with Floating Piston Seal

For maximum pressure balance over a range of material viscosities.

### **Typical Applications**

- · Fleet services facilities
- In-plant
- Mining

### Typical Fluids Handled

• Grease up to NLGI #2



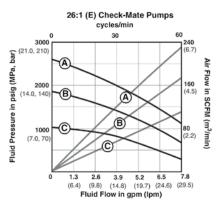
### **Pump Performance**



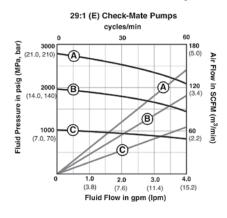
### **NXT 14:1 Check-Mate Pumps**

### 14:1 (E) Check-Mate Pumps cycles/min 30 1600 (11.2, 112) Fluid Pressure in psig (MPa, bar) Air Flow in SCFM (m3/min) 1200 (8.4, 84) 120 (3.4) 800 B (5.6, 56) 400 © (2.8, 28)5.2 6.5 (6.4) (9.8) (14.8) (19.7) (24.6) (29.5) Fluid Flow in gpm (lpm)

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



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



| NXT Check-Mate 14:1  14:1  NXT 3400  7.5 in (191 mm)  L500CS  1,400 psi (97 bar / 9.7 MPa)  15.4 oz (435 g)  3/4 in NPT(F)  1-1/2 in NPT(M) | NXT Check-Mate 26:1  26:1  NXT 6500  10.4 in (264 mm)  L500CS  2,600 psi (179 bar / 17.9 MPa)  15.4 oz (435 g)                           | NXT Check-Mate 29:1 29:1 NXT 3400 7.5 in (191 mm) L250CS 2,900 psi (200 bar / 20 MPa)  |
|---|--|--|
| NXT 3400 7.5 in (191 mm) L500CS 1,400 psi (97 bar / 9.7 MPa) 15.4 oz (435 g) 3/4 in NPT(F)  | NXT 6500<br>10.4 in (264 mm)<br>L500CS<br>2,600 psi (179 bar / 17.9 MPa)   | NXT 3400<br>7.5 in (191 mm)<br>L250CS  |
| 7.5 in (191 mm)<br>L500CS<br>1,400 psi (97 bar / 9.7 MPa)<br>15.4 oz (435 g)<br>3/4 in NPT(F)   | 10.4 in (264 mm)<br>L500CS<br>2,600 psi (179 bar / 17.9 MPa)   | 7.5 in (191 mm)<br>L250CS  |
| L500CS<br>1,400 psi (97 bar / 9.7 MPa)<br>15.4 oz (435 g)<br>3/4 in NPT(F)  | L500CS<br>2,600 psi (179 bar / 17.9 MPa)   | L250CS   |
| 1,400 psi (97 bar / 9.7 MPa)<br>15.4 oz (435 g)<br>3/4 in NPT(F)  | 2,600 psi (179 bar / 17.9 MPa)   |  |
| 15.4 oz (435 g)<br>3/4 in NPT(F)  | , , , ,  | 2.900 psi (200 bar / 20 MPa)   |
| 3/4 in NPT(F)   | 15.4 oz (435 g)  | _, =, = = por (= = = = = = / = = = = = = = = = = = =   |
|   |  | 7.7 oz (218 g)   |
| 1-1/2 in NPT(M)   | 3/4 in NPT(F)  | 3/4 in NPT(F)  |
| ` '   | 1-1/2 in NPT(M)  | 1 in NPT(F)  |
| 0 psi to 100 psi (0 bar 7 bar)  | 0 psi to 100 psi (0 bar to 7 bar)  | 0 psi to 100 psi (0 bar to 7 ba  |
| 20 cpm  | 20 cpm   | 20 cpm   |
| 1.0 срр   | 1.0 срр  | 2.1 cpp  |
| 2 cpk   | 2 cpk  | 5 cpk  |
| Wetted Parts  nickel plated; carbon steel, zinc and electroless nickel plated;  |  | ETD 150, 41L40, and 4140 all<br>steel; 304, 316, 17-4PH and<br>440C grades of stainless stee<br>acetal; carbon-filled PTFE; carb<br>steel; ductile iron; electroless<br>nickel, zinc and chrome plating<br>PTFE; UHMWPE  |
| 77 dB(A)  | 80 dB(A)   | 77 dB(A)   |
| 87 dB(A)  | 90 dB(A)   | 87 dB(A)   |
| 152 lb (69 kg)  | 169 lb (77 kg)   | 128 lb (58 kg)   |
| System - 312863   | System – 312863<br>Pump – 312376   | System – 312863<br>Pump – 312376<br>Pump Lower – 312375  |
|   | E52100 and ETD 150 alloy steel; PTFE; UHMWPE; carbon-filled PTFE; acetal 77 dB(A) 87 dB(A) 152 lb (69 kg)  System – 312863 Pump – 312376 | nickel plated; carbon steel, zinc and electroless nickel plated; E52100 and ETD 150 alloy steel; PTFE; UHMWPE; carbon-filled PTFE; acetal  77 dB(A)  87 dB(A)  87 dB(A)  152 lb (69 kg)  System – 312863  nickel plated; carbon steel, zinc and electroless nickel plated; E52100 and ETD 150 alloy steel; PTFE; UHMWPE; carbon-filled PTFE; acetal  80 dB(A)  90 dB(A)  169 lb (77 kg)  System – 312863 |



### **Pump Performance**







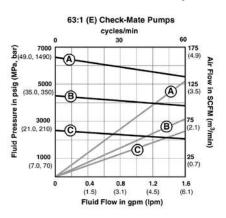


TEST FLUID: No. 10 Weight Oil

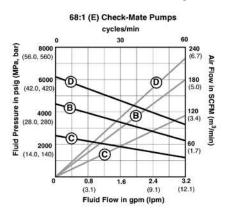
### **NXT 55:1 Check-Mate Pumps**

# 55:1 (E) Check-Mate Pumps cycles/min 30 60 (42.0, 420) Air Flow in SCFM (m³/min) (14.0, 140) (15.2) Fluid Flow in gpm (lpm)

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



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



| nnical 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 срр  | 5.2 cpp  | 2.6 cpp   |  |  |  |
| Cycles per Kg                  | 5 cpk  | 11 cpk   | 6 cpk   |  |  |  |
| Wetted Parts                   | ETD 150, 41L40 and 4140 alloy<br>steel; 304 and 17-4PH grades of<br>stainless steel; acetal; carbon-<br>filled PTFE; CS; ductile iron; eNi,<br>Zn and chrome plating; UHMWPE | ETD 150, 41L40 and 4140 alloy<br>steel; 304 and 17-4PH grades of<br>stainless steel; acetal; carbon-<br>filled PTFE; CS; ductile iron; eNi,<br>Zn and chrome plating; UHMWPE | ETD 150, 41L40 and 4140 alloy<br>steel; 304, 316 and 17-4PH<br>grades of stainless steel; acetal;<br>carbon-filled PTFE; CS; ductile<br>iron; eNi, Zn and chrome plating;<br>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<br>Pump – 312376<br>Pump Lower – 312375<br>Air Motor – 311238  | System – 312863<br>Pump – 312376<br>Pump Lower – 312375<br>Air Motor – 311238  | System – 312863<br>Pump – 312376<br>Pump Lower – 312375<br>Air Motor – 311238   |  |  |  |





# **Pump Packages with DataTrak**

| Package Number         | 247973         | 247976         | 247974         | 247977         | 247975         | 247978         |
|------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Ratio                  | 14:1           | 26:1           | 29:1           | 55:1           | 63:1           | 68:1           |
| Pump with DataTrak     | P14MCS         | P26MCS         | P29MCS         | P55MCS         | P63MCS         | P68MCS         |
| Mounting Type          | Floor Standing |
| Mounting Number        | 222276         | 222276         | 222276         | 222276         | 222276         | 222276         |
| 3/4 in x 6 ft Air Hose | 208610         | 208610         | 208610         | 208610         | 208610         | 208610         |
| 1 in x 6 ft Fluid Hose | 115042         | 244657         | 244657         | 244657         | 244657         | 244657         |

## **Pump Packages without DataTrak**

| Package Number         | 24E006         | 24E007         | 24E008         | 24E009         | 24E010         | 24E011         |
|------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Ratio                  | 14:1           | 26:1           | 29:1           | 55:1           | 63:1           | 68:1           |
| Pump without DataTrak  | P14DCS         | P26DCS         | P29DCS         | P55DCS         | P63DCS         | P68DCS         |
| Mounting Type          | Floor Standing |
| Mounting Number        | 222276         | 222276         | 222276         | 222276         | 222276         | 222276         |
| 3/4 in x 6 ft Air Hose | 208610         | 208610         | 208610         | 208610         | 208610         | 208610         |
| 1 in x 6 ft Fluid Hose | 115042         | 244657         | 244657         | 244657         | 244657         | 244657         |





## **RAM Pump Packages with DataTrak**

| Package Number         | 247979 | 247980 | 247981 |
|------------------------|--------|--------|--------|
| Ratio                  | 14:1   | 63:1   | 68:1   |
| RAM System             | CM53BA | CM17BA | CM2RBA |
| 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             | CM515A | CM155A | CM2L5A |
| 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

| chnical Specifications        |  |  |
|-------------------------------|--|--|
| Fluid Pressure Ratio          | 5:1  | 10:1   |
| Pump Number                   | 224912 – 35 lb (16 kg)<br>224751 – 120 lb (55 kg)<br>224752 – 400 lb (180 kg)      | 247540 - 60 lb (27 kg)<br>247443 - 120 lb (55 kg)<br>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,<br>polyurethane, Buna-N,<br>polyester elastomer                     | Steel, copper,<br>polyurethane, Buna-N,<br>polyester elastomer                     |
| Sound Pressure Level          | 77 dB(A)   | 77 dB(A)   |
| Approximate Weight            | 224912 – 32.5 lb (14.7 kg)<br>224751 – 37.5 lb (17 kg)<br>224752 – 42 lb (19.1 kg) | 247540 – 41 lb (18.6 kg)<br>247443 – 43.5 lb (19.7 kg)<br>247450 – 48 lb (21.8 kg) |
| Instruction Manual            | 308156   | 312350   |





## **Dyna-Star Hydraulic Pumps**

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

#### **Accessories**

#### **Drum Covers**



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

#### **Follower Plates**



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

#### **Hydraulic Fluid Controls**

Required for each pump



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

#### **Tie-Down Covers**



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

<sup>\*</sup>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

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

# **Viscount® II Pumps**



## >>> Ordering Information

## **Viscount II Pumps**

| Part Number Description |        | 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. |



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



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

\*\* 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).

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



#### **Grease Valves**

| dicuse valves | Fluid                   | Type            | Maximum<br>Working Pressure   | Maximum<br>Flow Rate Intended Use |                    | Warranty | Reference<br>Pages |
|---------------|-------------------------|-----------------|---|-----------------------------------|--------------------|----------|--------------------|
| Accu-Shot™    | NLGI #2                 | Metered         | 8,000 psi<br>(552 bar)  | 2 lb/min<br>1 kg/min              | Indoor/<br>Outdoor | 1 year   | 153                |
| Pro Shot™     | Grease up to<br>NLGI #2 | Non-<br>Metered | 8,000 psi<br>(552 bar)  | 2 lb/min<br>1 kg/min              | Indoor/<br>Outdoor | 1 year   | 154                |
| Power Shot™   | Grease up to<br>NLGI #2 | Booster         | Supply<br>5,000 psi<br>(345 bar)<br>Output<br>18,000 psi<br>(1,242 bar) | N/A                               | Indoor/<br>Outdoor | 1 year   | 155                |

#### Grease Guns

| Grease Guns |                         |        |   |   |                    |          |                    |
|-------------|-------------------------|--------|---|---|--------------------|----------|--------------------|
|             | Fluid                   | Style  | Maximum<br>Working Pressure                           | Loading   | Intended Use       | Warranty | Reference<br>Pages |
| Manual      | Grease up to<br>NLGI #2 | Lever  | 6,000 psi to<br>10,000 psi<br>(414 bar to<br>690 bar) | Cartridge/<br>bulk fill/<br>loader fill/<br>suction | Indoor/<br>Outdoor | 1 year   | 156                |
| Pneumatic   | Grease up to<br>NLGI #2 | Pistol | 6,000 psi<br>(414 bar)                                | Bulk fill/<br>loader fill                           | Indoor/<br>Outdoor | 1 year   | 156                |
| Booster     | Grease up to<br>NLGI #2 | Pistol | 10,000 psi<br>(690 bar)                               | Loader fill   | Indoor/<br>Outdoor | 1 year   | 156                |







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

#### Typical Fluids Handled

• Grease up to NLGI #2

| nne |  |
|-----|--|

#### Accuracy ± 3% with grease consistency (grade NLGI) 2/3 Repeatability (typical) $\pm$ 1% with grease consistency (grade NLGI) 2/3 -4°F to 158°F (-20°C to 170°C) Storage Temperature Range 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) 8.8 in L x 1.8 in W x 4.4 H Dimensions (without extension) (22.4 cm L x 4.6 cm W x 11.2 cm H) 2.2 lb (1.0 kg) Weight One year Warranty 309454 Instruction Manual

#### 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.



#### **Adjustment Nut**

Protected by rigid guard.

#### Pressure-Assisted Trigger

For ease of operation.

#### Easy Top Adjustment

With locking nut.

#### Rugged Design

For harsh environments.

#### Typical Applications

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

#### Typical Fluids Handled

• Grease up to NLGI #2

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





- 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) |





# 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/<br>loader fill | Rigid extension and hydraulic coupler |  |              |   |  |  |       |       |  |  |  |
|   | 203697      | Booster   | Pistol   | 10,000 (690)       | Loader fill               | Rigid extension                       |  |              |   |  |  |       |       |  |  |  |
|   | 110218      |           |          | 6,000 (414)        | Cartridge/bulk fill       | Rigid extension and hydraulic coupler |  |              |   |  |  |       |       |  |  |  |
| H | 110216      |           |          |                    |                           | Lever -                               |  | Level        | Levei                                   | Level  | Level  | Level | LOVOI |  |  | Rigid extension, hydraulic coupler and air bleeder valve |
| K | 110203      | Manual    | Pistol   | Pistol             | Pistol                    |                                       |  | 10,000 (690) | Cartridge/<br>bulk fill/<br>loader fill | Rigid extension, hydraulic coupler and air bleeder valve |  |       |       |  |  |  |
| 2 | 110202      | Pistol    |          |                    |                           |                                       |  | PISIOI       |   |  | 12 in (30.4 cm) flexible extension,<br>hydraulic coupler and air bleeder valve |       |       |  |  |  |
| H | 110201      |           | Suction  | -                  | Suction                   | 12 in (30.4 cm) clear plastic hose    |  |              |   |  |  |       |       |  |  |  |

#### **Accessories**

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

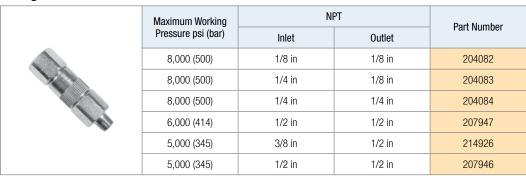




#### **Z-Swivels**

| Maximum Working<br>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**



#### 360° Swivels



| Part Number | Includes |         |
|-------------|----------|---------|
| Fait Number | 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 tag 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. |
| Swivel nozzle. Includes straight 12 in (30.4 cm), 1/8 NPT(M) extension tube (155836) and tapered nose (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).   |  |
| Flexible 12 in (30.4 cm) hose nozzle. 1/8 NPT(M) includes tapered-nose coupler (200325) and lock-sleet 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.   |







#### **Couplers**

| Part Number   | Description   |
|---|---|
| 200325 1/8 NPT(F) inlet standard tapered-nose coupler. Hardened jaws grip grease fittings through wide-sealing angle, but release easily. Maximum working pressure 8,000 psi (551 bar). |   |
| 202650  | 1/8 NPT(F) inlet standard straight-nose grease coupler for manual operated grease guns only.  Maximum working pressure 3,000 psi (206 bar). |
| 200020  | 1/8 NPT(F) inlet standard button-head coupler. Gives fast, positive seal on button-head fittings.   |
| 200021  | 1/8 NPT(F) inlet giant button-head coupler. Gives fast, positive seal on larger button-head fittings.                                       |





#### **Adapters**

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

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





205582





## 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                |















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

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

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

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



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

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

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



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

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



#### **Easy-Outs**

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



#### **Grease Accessory Packages**

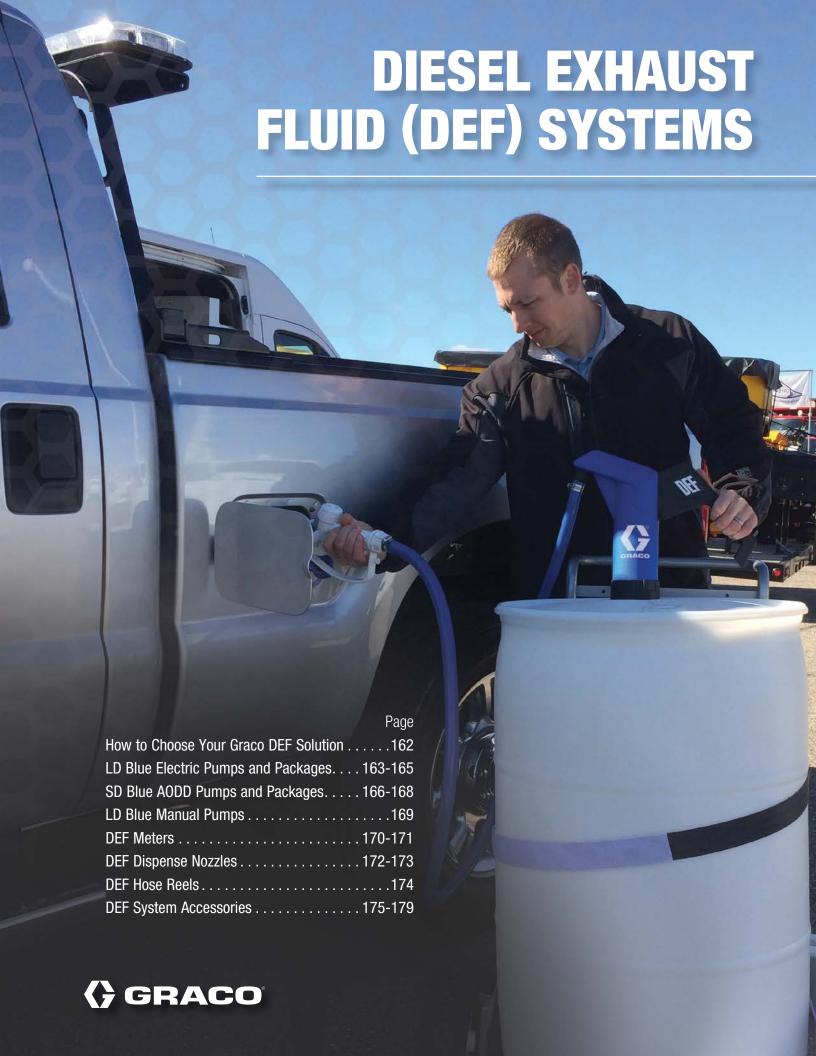
Convenient storage box contains the following threaded fittings in the quantities listed:

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



| Notes |      |      |
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# Flexible Installation – Solutions for Every Application

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







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



#### **Identify your power supply**

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







## **Determine your container size**\*

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

\*Tote and drum not for sale from Graco



## **Choose your accessories**

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





# A Reliable Industrial Pump with Self-Priming Capabilities

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



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

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

#### Stay Up and Running Longer

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



#### **Typical Applications**

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

#### Typical Fluids Handled

Diesel exhaust fluid

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

## >>> Ordering Information

#### **Pump Only**

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

reducing the need for maintenance.



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





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







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



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

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

#### Modular Air Valve

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

#### Robust Design

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

#### Versatility

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

#### Rugged Construction

Resists corrosion for reliable performance and long life.

#### **Typical Applications**

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

#### Typical Fluids Handled

· Diesel exhaust fluid

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

#### Ordering Information

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





## **SD Blue Pump Tote Packages**









|                                    | Deluxe           |                  | Standard   |            |
|------------------------------------|------------------|------------------|------------|------------|
| Package Number                     | 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,<br>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<br>Length             | 6 ft             | 6 ft             | 5 ft       | 5 ft       |
| Fittings (2)                       | 3/4 in BSPP(MBE) | 3/4 in BSPP(MBE) | SST Clamps | SST Clamps |

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





# **SD Blue Pump Drum Packages**









|                                    | Deluxe         |                | Standard   |            |  |
|------------------------------------|----------------|----------------|------------|------------|--|
| Package Number                     | 24F947         | 24M499         | 24V679     | 24V686     |  |
| Mount Type                         | Drum           | Drum           | Drum       | Drum       |  |
| Type of Nozzle                     | Manual         | Automatic      | Manual     | Automatic  |  |
| Air-Operated Pump                  | 24G745         | 24G745         | 24G745     | 24G745     |  |
| Mounting Bracket                   | 24F679         | 24F679         | 24W185     | 24W185     |  |
| Valve/Nozzle                       | 125078         | 24F529         | 125078     | 127649     |  |
| Meter                              | _              | 24H293         | -          | 127663     |  |
| Drum Quick Connect Kit             | 24F532         | 24F532         | _          | _          |  |
| Air Regulator and Gauge            | 110147         | 110147         | _          | -          |  |
| Air Shut-Off Ball Valve,<br>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<br>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).







#### **Features and Benefits**

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

#### **Typical Applications**

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

#### Typical Fluids Handled

• Diesel exhaust fluid

#### **Technical Specifications**

Maximum Flow Rate

11 oz per stroke

#### >>> Ordering Information

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

#### **Accessories**

| Part Number | Description                                   |
|-------------|---|
| 125479      | Drum length adjustable downtube for hand pump |
| 125478      | 6 ft dispense hose with ball valve            |





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

#### Typical Fluids Handled

• Diesel exhaust fluid

#### **Features and Benefits**

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

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

## >>> Ordering Information

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







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

#### Typical Fluids Handled

• Diesel exhaust fluid

#### **Features and Benefits**

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

| 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**

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







- Easy break-away system for low-cost repairs if the spout becomes detached
- Choose with or without built-in meter
- 4 gpm to12 gpm flow rate
- 50 psi maximum pressure
- 3/4 in BSPP inlet to transform nozzle into optional mis-filling system to prevent mis-fills
- · Stainless steel spout

| Te | Technical Specifications    |  |  |
|----|-----------------------------|--|--|
|    |                             | Automatic Shut-Off Nozzle              | Automatic Shut-Off Nozzle<br>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) @<br>9.3 gpm (35 lpm) | 13 psi (0.9 bar) @<br>9.3 gpm (35 lpm)                 |
|    | Instruction Manual          | 333468                                 | 333469   |

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

#### Typical Fluids Handled

· Diesel exhaust fluid

## >>> Ordering Information

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

#### **Accessories**

| 100 | 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)                             |



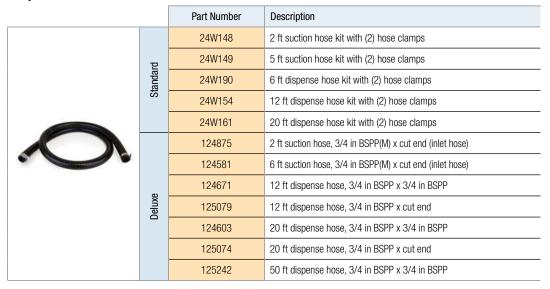


#### **Mounting Brackets**



| 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**



#### **Pump Handle**





# **Fittings**

| rittings                                | Part Number | Description   |  |  |
|---|-------------|---|--|--|
|   | 127656      | 1 in BSP(F) elbow fitting, black                                    |  |  |
|   | 127657      | 1 in BSP(F) x 3/4 in barb hose tail, black                          |  |  |
| 80                                      | 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                     |  |  |
| 111111111111111111111111111111111111111 | 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                          |  |  |



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.

| <br>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.

# **Closed-System Coupler Accessories**



#### >>> 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<sup>™</sup>) is designed for one-way, single-use applications. Engineered for use when operations require the container package to be used once, emptied and recycled.

| and recycled.                             | Part Number | Description  |  |  |
|---|-------------|--|--|--|
|   | 17C907      | Micro Matic EPV dispense coupler, 3A orange, 3/4 in barbed outlet, EPDM seals                  |  |  |
|   | 127634      | Micro Matic EPV container valve, 3A orange, 2.5 in x 5 buttress, EPDM Seals                    |  |  |
|   | 127793      | Micro Matic EPV downtube for 55 gal drum   |  |  |
|   | 127794      | Micro Matic EPV center downtube for 275 gal IBC tote   |  |  |
|   | 127635      | Micro Matic EPV center downtube for 330 gal IBC tote   |  |  |
|   | 17C908      | Micro Matic RSV dispense coupler, 3/4 in barbed outlet, 4 pin, stainless steel                 |  |  |
|   | 127637      | Micro Matic RSV container valve, 2.5 in x 5 in, 4 cam, stainless steel valve, EPDM seals       |  |  |
| P And | 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<sup>™</sup> is a trademark of Micro Matic USA, Inc.





## **Micro Matic Packages**

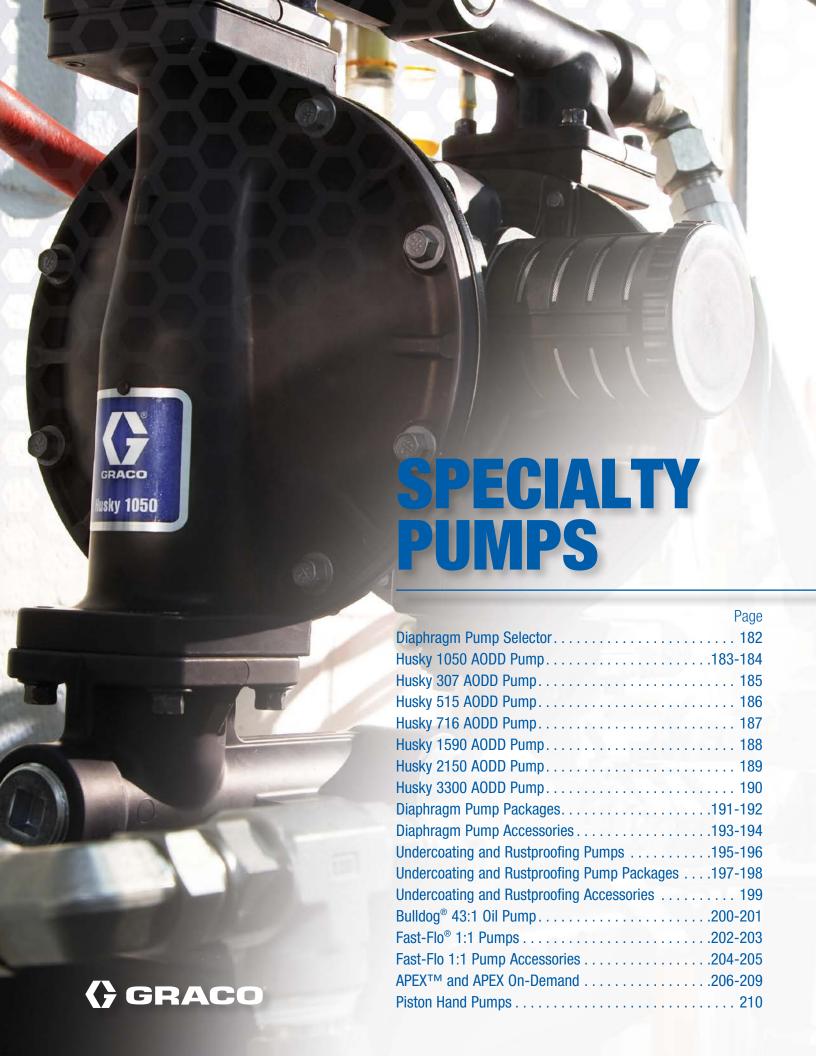
Includes coupler, valve and downtube.

| 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) |  |  |



| Notes |      |  |
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# **Diaphragm Pump Selection Guide**











| Husky Series | Part Number | Pump Description   | Fluids  | Listings | Max PSI              | Reference Pages |
|--------------|-------------|--|---|----------|----------------------|-----------------|
| Husky 307    | D31255      | Husky 307<br>Acetal – 3/8 in<br>Acetal/TPE                         | Oil evacuation Oil transfer Water Anti-freeze Windshield wash fluid | -        | 100 psi<br>(6.9 bar) | 185             |
| Husky 515    | 243669      | Husky 515<br>Acetal Split Inlet – 3/4 in<br>Acetal/Buna Dual Inlet | 50/50 windshield wash solution     Water     Anti-freeze            | -        | 100 psi<br>(6.9 bar) | 186             |
| Husky 716    | 241906      | Husky 716<br>Aluminum – 3/4 in<br>Aluminum/Buna-N                  | Oil evacuation Oil transfer Water Anti-freeze Windshield wash fluid | -        | 100 psi<br>(6.9 bar) | 187             |
| Husky 1050   | 647016      | Husky 1050<br>Aluminum – 1 in<br>Aluminum/TPE                      | Water     Anti-freeze     Fuel transfer                             | UL       | 100 psi<br>(6.9 bar) | 183-184         |
| Husky 1050   | 647731      | Husky 1050<br>Aluminum – 1 in<br>Aluminum/Buna-N                   | Oil evacuation Oil transfer   | UL       | 100 psi<br>(6.9 bar) | 183-184         |
| Husky 1050   | 647648      | Husky 1050<br>Aluminum – 1 in<br>Aluminum/TPE                      | Fuel dispense   | UL       | 50 psi<br>(3.5 bar)  | 183-184         |
| Husky 1590   | DB3525      | Husky 1590<br>Aluminum – 1.5 in<br>Aluminum/TPE                    | Oil evacuation Oil transfer Water Anti-freeze                       | -        | 120 psi<br>(8.3 bar) | 188             |
| Husky 2150   | DF3525      | Husky 2150<br>Aluminum – 2 in<br>Aluminum/TPE                      | Oil evacuation Oil transfer Water Anti-freeze                       | -        | 120 psi<br>(8.3 bar) | 189             |
| Husky 3300   | 652002      | Husky 3300<br>Aluminum – 3 in<br>Aluminum/TPE                      | Oil evacuation Oil transfer Water Anti-freeze                       | -        | 125 psi<br>(8.6 bar) | 190             |













# 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

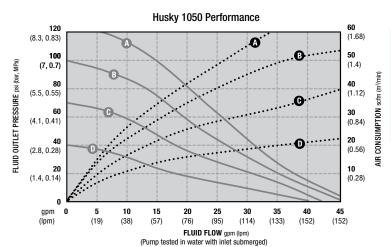
#### **Typical Applications**

- 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**



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



# **Husky 1050 AODD Pump**











| nical 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  |

<sup>\*</sup>Sound power measured per ISO-9614-2.

# >>> Ordering Information

# **Husky 1050 AODD Pumps**

| Part Number | Description                                      | Maximum Fluid Working Pressure | Fluids Handled                      |
|-------------|--|--------------------------------|-------------------------------------|
| 647016      | Husky 1050 Aluminum Pump – 1 in, Aluminum/TPE    | 100 psi (6.9 bar)              | Water / 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                       |



<sup>\*\*</sup>Sound pressure was tested 3.28 ft (1 m) from equipment.











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

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

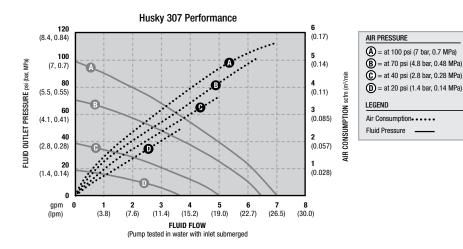
| Technical Specifications  |   |  |  |
|---|---|--|--|
| Maximum fluid working pressure  | 100 psi (6.9 bar, 0.69 MPa)                                     |  |  |
| Maximum free-flow delivery*   | 7.0 gpm (26.5 lpm)  |  |  |
| Maximum pump speed  | 330 cpm   |  |  |
| Fluid displacement per cycle**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

<sup>\*</sup>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**

|  |             | <del>-</del>                               |
|--|-------------|--|
|  | Part Number | Description                                |
|  | D31255      | Husky 307 Acetal Pump – 3/8 in, Acetal/TPE |













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

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

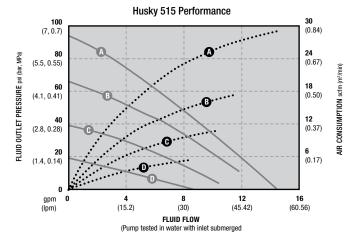
| Technical Specifications   |   |  |  |
|--|---|--|--|
| Maximum fluid working pressure   | 100 psi (6.9 bar, 0.69 MPa)                                     |  |  |
| Maximum free-flow delivery*  | 15 gpm (57 l/min)   |  |  |
| Maximum pump speed   | 400 cpm   |  |  |
| Fluid displacement per cycle**   | 0.04 gal (0.15 l)   |  |  |
| Maximum suction lift   | 15 ft (4.5 m) dry, 25 ft (7.6 m) wet                            |  |  |
| Maximum-size pumpable solids   | 3/32 in (2.5 mm)  |  |  |
| Maximum ambient operating temperature***                               | 180°F (82.2°C)  |  |  |
| Maximum diaphragm operating temperature***                             | 180°F (82.2°C)  |  |  |
| Typical sound level at 70 psi (4.8 bar, 0.48 MPa) air @ 50 cpm         | 77 dB(A)  |  |  |
| Maximum air consumption  | 28 scfm (0.672 m³/min)  |  |  |
| Air pressure operating range   | 30 psi to 100 psi<br>(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 very based on displacem materi | al. **Diaplacement per avale may yany beend an ay-+!            |  |  |

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

# Ordering Information

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

| р           |                                |  |  |
|-------------|--------------------------------|--|--|
| Part Number | Description                    |  |  |
| 243669      | Husky 515 Acetal Split Inlet – |  |  |















#### **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

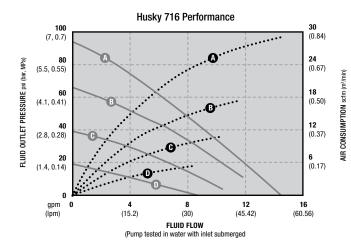
| chnical Specifications  |   |
|---|---|
| Maximum fluid working pressure  | 100 psi (6.9 bar, 0.69 MPa)   |
| Maximum free-flow delivery*   | 16 gpm (61 l/min)   |
| Maximum pump speed  | 400 cpm   |
| Fluid displacement per cycle**  | 0.04 gal (0.15 l)   |
| Maximum suction lift  | 15 ft (4.5 m) dry, 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<br>(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,<br>PTFE, zinc-plated steel |
| Instruction manual  | 308573  |
| *Flow rates are with muffler and do not vary based on diaphragm materia | al. **Displacement per cycle may vary based on suction                |

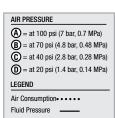
<sup>\*</sup>Flow rates are with muffler and do not vary based on diaphragm material. \*\*Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type. \*\*\*Actual pump performance may be affected by prolonged usage at temperature.

# >>> Ordering Information

## **Husky 716 AODD Pump**

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

















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

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

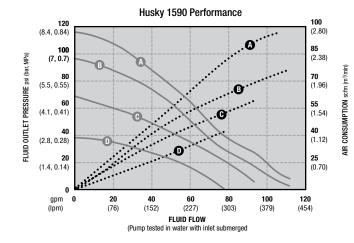
| echnical Specifications   |   |  |
|---|---|--|
| Maximum fluid working pressure                                  | 120 psi (8.4 bar, 0.84 MPa)                                     |  |
| Maximum free-flow delivery*                                     | 100 gpm (378.5 l/min)   |  |
| Maximum pump speed  | 200 cpm   |  |
| Fluid displacement per cycle**                                  | 0.5 gal (1.96 l)  |  |
| Maximum suction lift  | 20 ft (6.1 m) dry   |  |
| Maximum-size pumpable solids                                    | 0.19 in (4.8 mm)  |  |
| Maximum ambient operating temperature***                        | 150°F (65.5°C)  |  |
| Maximum diaphragm operating temperature***                      | 150°F (65.5°C)  |  |
| Typical sound level at 70 psi (4.8 bar, 0.48 MPa) air @ 125 cpm | 77 dB(A)  |  |
| Maximum air consumption   | 125 scfm (3.5 m³/min)   |  |
| Air pressure operating range                                    | 20 psi to 100 psi<br>(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  |  |

<sup>\*</sup>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 –<br>1.5 in, Aluminum/TPE |  |

















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

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

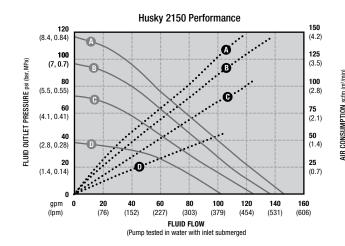
| echnical Specifications   |   |  |
|---|---|--|
| Maximum fluid working pressure  | 120 psi (8.4 bar, 0.84 MPa)                                     |  |
| Maximum free-flow delivery*   | 150 gpm (568 l/min)   |  |
| Maximum pump speed  | 145 cpm   |  |
| Fluid displacement per cycle**  | 1.03 gal (3.9 l)  |  |
| Maximum suction lift  | 20 ft (6.1 m) dry   |  |
| Maximum-size pumpable solids  | 0.25 in (6.3 mm)  |  |
| Maximum ambient operating temperature***                              | 150°F (65.5°C)  |  |
| Maximum diaphragm operating temperature***                            | 150°F (65.5°C)  |  |
| Typical sound level at 70 psi (4.8 bar, 0.48 MPa) air @ 125 cpm       | 78 dB(A)  |  |
| Maximum air consumption   | 175 scfm (4.9 m³/min)   |  |
| Air pressure operating range  | 20 psi to 120 psi<br>(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 you beard an disphrage materi | -1 ++D'1  |  |

<sup>\*</sup>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 –<br>2 in, Aluminum/TPE |















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

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

| Technical Specifications                                       |   |  |  |  |
|--|---|--|--|--|
| Maximum fluid working pressure                                 | 125 psi (8.4 bar, 0.84 MPa)                                     |  |  |  |
| Maximum free-flow delivery*                                    | 300 gpm (1,135 l/min)   |  |  |  |
| Maximum pump speed   | 103 cpm   |  |  |  |
| Fluid displacement per cycle**                                 | 2.9 gal (11 l)  |  |  |  |
| Maximum suction lift   | 8 ft (2.4 m) dry, 28 ft (8.5 m) wet                             |  |  |  |
| Maximum-size pumpable solids                                   | 0.5 in (13 mm)  |  |  |  |
| Maximum ambient operating temperature***                       | 150°F (65.5°C)  |  |  |  |
| Maximum diaphragm operating temperature***                     | 150°F (65.5°C)  |  |  |  |
| Typical sound level at 50 psi (3.4 bar, 0.34 MPa) air @ 50 cpm | 92 dB(A)  |  |  |  |
| Maximum air consumption  | 335 scfm (9.5 m³/min)   |  |  |  |
| Air pressure operating range                                   | 20 psi to 125 psi<br>(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<br>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  |  |  |  |

<sup>\*</sup>Maximum values with water as media at ambient temperature. Water level is approximately 3 ft above pump inlet.

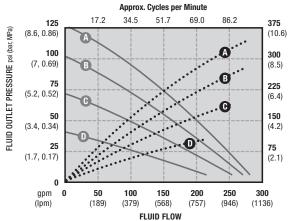
# Ordering Information

#### Husky 3300 AODD Pump

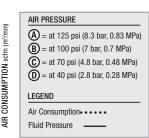
|             | р                     |
|-------------|-----------------------|
| Part Number | Description           |
| 652002      | Husky 3300 Aluminum – |

#### **Pump Performance**

#### Husky 3300 Performance



(Pump tested in water with inlet submerged)





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

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





# >>> Ordering Information

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



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







# >>> 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   |
|--|-------------|--------|---------|--------|--------|--------|--------|
| The state of the s | Part Number | 110146 | 110146  | 106148 | 106149 | 106150 | 106150 |

# **Air Regulator and Gauge**

| <br>        |        |         |        |        |        |        |
|-------------|--------|---------|--------|--------|--------|--------|
| 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**

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

# **Bleed-Type Air Valve**

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

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

| 18           | Husky Pump  | 307    | 515    | 1050   | 1590 | 2150 | 3300 |
|--------------|-------------|--------|--------|--------|------|------|------|
| A CONTRACTOR | Part Number | 237211 | 194347 | 24D205 | -    | -    | -    |

# **Grounding Wire and Clamp**

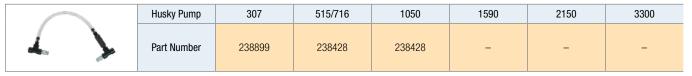
| Husky Pump  | 307    | 515/716 | 1050   | 1590   | 2150   | 3300   |
|-------------|--------|---------|--------|--------|--------|--------|
| Part Number | 222011 | 222011  | 238909 | 222011 | 238909 | 238909 |

#### **Suction Hose Kit**

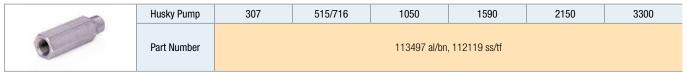
| n | Husky Pump  | 307    | 515/716 | 1050   | 1590   | 2150   | 3300 |
|---|-------------|--------|---------|--------|--------|--------|------|
|   | Part Number | 236054 | 236054  | 236054 | 222916 | 222916 | -    |

# **Diaphragm Pump Accessories**

#### **Thermal Relief Kit**



# Thermal Relief Valves - 150 psi (10.3 bar)



#### **Wall Bracket**

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

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

|   | 0      |        |        |        |        |        |        |        |        |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Pump Number                                     | D31255 | 243669 | 241906 | 647016 | 647731 | 647648 | DB3525 | DF3525 | 652002 |
| Air Valve<br>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<br>(Ball, Seats,<br>Diaphragm) | D03255 | D05277 | D05277 | 25A857 | _      | 25A857 | D0B525 | D0F525 | 25A874 |





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

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

#### Durable

Thick cast aluminum air motor housing offers unmatched durability.

#### Superior Material Handling

Double-acting pump ensures smooth fluid flow.

#### Extended Seal Life

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

#### Wetted-Parts Options

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

#### Corrosion-Resistant

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

#### **Typical Applications**

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

#### Typical Fluids Handled

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

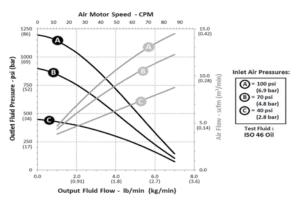


# **Undercoating and Rustproofing Pumps**



# Pump Performance

# Fire-Ball 300 15:1 Pumps



| FL 14 Day on Dall's                             | 454                                    |
|---|--|
| 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          |

<sup>\*</sup>Dispense kit includes Air Regulator (110234), Air Gauge (100960), Spray Gun (234237)

# **Undercoating and Rustproofing Pump Packages**



# Ordering Information

# **Spray Masking Package**



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

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



# >>> Ordering Information

# **Application Gun**

| 4 |
|---|
|---|

| 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**

| 4 | CE    | Long |
|---|-------|------|
| 1 | -     |      |
| - | - 300 |      |
|   |       |      |

| 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  |
|---|-------------|--|
| 9 | 206496      | Nozzle extension delivers 360° coating fan into blind areas.<br>Length 30-3/4 in (99 cm) x 7/8-14(f) end. Tip 206502, size .043. |

# **Replacement Screen Elements (SST)**

|         | Part Number |         |          |
|---------|-------------|---------|----------|
|         | 30 Mesh     | 60 Mesh | 100 Mesh |
| 3-Pack  | 224458      | 224459  | 224469   |
| 25-Pack | 238436      | 238438  | 238440   |

#### **Swivel**



| Part Number | Description  |
|-------------|--|
| 202577      | Z-swivel allows non-binding movement for hard-to-reach locations. Order 155570 adapter separately to accommodate 234237 gun. |











# **Reliable Operation in the Harshest Environments**

With its efficient, large-ported air valve, the Bulldog 43:1 air-powered pump is the highest-performing in its class. Downtime is minimized by an air motor design that has been developed and tested for more than 10 million cycles of operation.



Grounded lug prevents static buildup.

#### Easy Installation

Compact, low-profile design makes installation easier.

#### Corrosion-Resistant

Lightweight aluminum construction.

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

Tested to 10 million cycles without failure.

#### **Typical Applications**

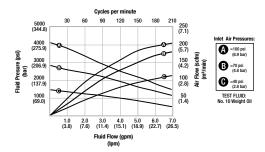
· Supplies hydraulic oil to accumulators in oil rig blowout prevention systems.

#### Typical Fluids Handled

Hydraulic oil

#### **Pump Performance**

#### **Bulldog 43:1 Pumps**













| Technical Specifications   |  |  |  |  |  |
|--|--|--|--|--|--|
| 43:1   |  |  |  |  |  |
| 4,300 psi (301 bar / 30.1 MPa)   |  |  |  |  |  |
| 100 psi (7 bar)  |  |  |  |  |  |
| 3/4 in NPSM(F)   |  |  |  |  |  |
| 1 in NPT(F)  |  |  |  |  |  |
| 3/4 in NPT(F)  |  |  |  |  |  |
| Carbon steel, stainless steel, chrome plating, zinc plating, nickel plating, brass, Buna-N |  |  |  |  |  |
| 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

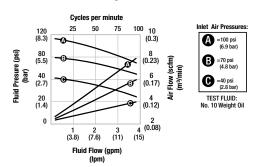
#### Typical Fluids Handled

- 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**

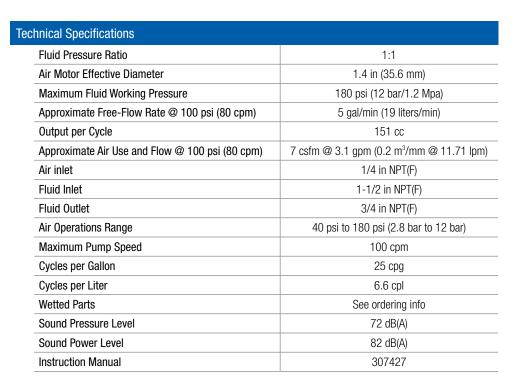












# >>> Ordering Information

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

Includes motor and pump lower assembly

| Fluid                    | Length    | Tube Material   | Seal Material | Approvals   | Part Number |
|--------------------------|-----------|-----------------|---------------|-------------|-------------|
| Anti-Freeze, Windshield  | Drum      | Stainless Steel | Polyethylene  | ETL, CE, EX | 226942      |
| Washer Solvent, ATF, Oil | Universal | Stainless Steel | Polyethylene  | ETL, CE, EX | 226945      |
|                          |           |                 | Buna-N        | CE          | 226947      |
|                          |           |                 | Buna-N        | CE          | 226951*     |
|                          |           |                 | Leather       | CE, EX      | 237133      |
|                          | Drum      | Carbon Steel    | PTFE          | CE, EX      | 237134      |
|                          | Drum      |                 | Leather       | ETL, CE, EX | 226940      |
|                          |           |                 | Polyethylene  | ETL, CE, EX | 226941      |
|                          |           | Stainless Steel | Buna-N        | CE          | 226953      |
| Oil                      |           |                 | PTFE          | CE, EX      | 237129      |
|                          | Universal | Carbon Steel    | Buna-N        | CE          | 226948      |
|                          |           |                 | Leather       | CE, EX      | 237130      |
|                          |           |                 | PTFE          | CE, EX      | 237131      |
|                          |           |                 | Leather       | ETL, CE, EX | 226943      |
|                          |           |                 | Polyethylene  | ETL, CE, EX | 226944      |
|                          |           | Stainless Steel | Buna-N        | CE          | 226952      |
|                          |           |                 | PTFE          | CE, EX      | 237132      |

<sup>\*</sup>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                |                           |  |
|-----|-------------|---|-------------------------|---------------------------|--|
|     | Fait Number | Description   | Air Hose / Swivel Elbow | Fluid Hose / Swivel Elbow |  |
| 133 | 222118      | 18 in (0.5 m) for connecting wall-mounted<br>Fast-Flo 1:1 pumps to piping | 109123 / 155541         | 109108 / 160327           |  |
|     | 222119      | 6 ft (1.8 m) for use with drum-mounted<br>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     |              |           |
|----------|---------------|--|--------------|--------------|-----------|
| <b>₽</b> | rait Nullibei | Description  | Bung Adapter | Bushing Pipe | 6 ft Hose |
|          | 236054        | 6 ft (1.8 m) suction kit for 55 gal (200 l) drums. For use with Fast-Ball, Mini Fire-Ball and Fire-Ball universal pumps. | 188845       | 101496       | 109105    |



# >>> Ordering Information

# **Drum Covers**

|   | Part Number | Description  |
|---|-------------|--|
|   | 204574      | Drum cover for 10 gal (40 l) and 16 gal (60 l) sized containers. Drum cover mounts on top of an open drum with mounting house for a 1:1 pump. Includes thumb screws and a rubber gasket. |
| • | 200326      | Drum cover for a 55 gal (200 I) container. Drum cover mounts on top of an open drum, with mounting for a 1:1 pump.   |

## **Air Line Filter**

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

# **Air Line Lubricator**

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















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.





- 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 guiet 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





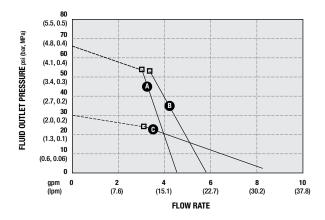




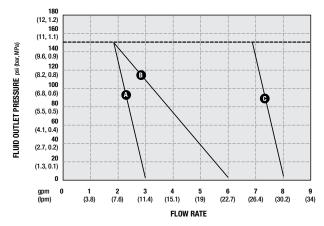












| PART NUMBERS LE      | GEND                |
|----------------------|---------------------|
| (A) = 260105, 260106 | Relief valve        |
| B = 260108           | setting at 150 psi  |
| (C) = 260109         | (10.3 bar, 1.0 MPa) |

# 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<br>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<br>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 |           |          |           |          | anized steel, |          |          |
| Weight lb (kg)                        | 34 (15)  | 25 (11)   | 25 (11)  | 25 (11)   | 25 (11)  | 25 (11)       | 25 (11)  | 30 (14)  |
| Manual                                |  | 311       | 305      |           |          | 311           | 306      |          |

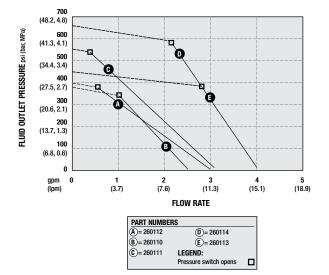












# >>> Ordering Information

## **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<br>(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  |            |            |            |            |













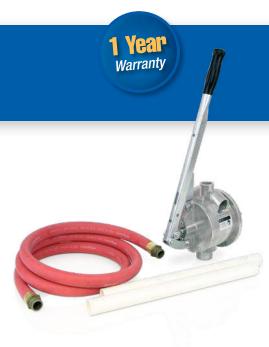
## **Accessories**

| 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  |









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 |  |  |





# **Graco Hose and Cord Reel Selection Guide**

|                                     | Typical Application  | Typical Fluid  | Hose/Cord<br>Length Options  | Enclosed | Reference<br>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)<br>• 45 ft (14 m)<br>• 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)<br>• 50 ft (15 m)<br>• 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)<br>• 50 ft (15 m)<br>• 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)<br>• 50 ft (15 m)<br>• 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)<br>• 50 ft (15 m)<br>• 65 ft (20 m)<br>• 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)<br>• 50 ft (15 m)<br>• 75 ft (23 m)<br>• 100 ft (30 m)  | No       | 239-244            |
| XD <sup>™</sup> 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)<br>• 75 ft (23 m)<br>• 100 ft (30 m)<br>• 150 ft (46 m) | No       | 246-256            |





# **LD Series Enclosed Hose Reels**



















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

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

#### Large Fluid Porting

Maximizes fluid flow with minimal pressure drop

#### Simple Spring Tension Adjustment

Ability to increase or decrease spring tension while reel is pressurized

## **Multiple Mounting Options**

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

#### Full Enclosure

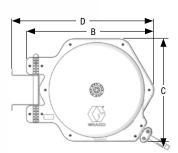
Tough, dent-proof, corrosion-resistant enclosure

#### **Typical Applications**

- Small maintenance shops
- Small fast lubes
- Indep
- · Industrial manufacturing facilities

#### В • Tire maintenance shops С

| all fast lubes             | С | 18.5 in (470 mm) |
|----------------------------|---|------------------|
| ependent repair facilities | D | 25.6 in (650 mm) |



#### Typical Fluids Handled

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

| D | 25.6 in (650 mm) |
|---|------------------|
|   |                  |
|   |                  |

7.1 in (180 mm)

23.0 in (585 mm)

**Dimensions** 

Α

| 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 Reel Packages**

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

| Type of                          | Fluid  | Hose          |                  | Connection Size  |                   | Maximum               | Package        | Package Includes |              |              |
|----------------------------------|--|---------------|------------------|------------------|-------------------|-----------------------|----------------|------------------|--------------|--------------|
| Mount                            |  | ID<br>in (mm) | Length<br>ft (m) | Inlet<br>in (mm) | Outlet<br>in (mm) | Pressure<br>psi (bar) | Part<br>Number | Reel<br>Assembly | Mount<br>Kit | Inlet<br>Kit |
|                                  |  | 3/8 (10)      | 35 (11)          | 1/2 (13)         | 3/8 (10)          | 250 (17.2)            | 24F737         | 24H657           | 24G866       |              |
|                                  | Air/Water/<br>Anti-Freeze/                               | 3/8 (10)      | 50 (15)          | 1/2 (13)         | 3/8 (10)          | 250 (17.2)            | 24F738         | 24H658           |              | 24C444       |
|                                  | Windshield<br>Washer Fluid                               | 1/2 (13)      | 35 (11)          | 1/2 (13)         | 1/2 (13)          | 250 (17.2)            | 24F739         | 24H659           |              | 24044        |
| <u>o</u> /41                     | Washiol Flaid  | 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           |              | 24053        |
| Cailing Mall                     | UII  | 1/2 (13)      | 35 (11)          | 1/2 (13)         | 1/2 (13)          | 1,800 (124)           | 24F742         | 24H662           |              | 24053        |
| Ceiling/Wall<br>Swivel Mount     | Grease   | 1/4 (6)       | 35 (11)          | 3/8 (10)         | 1/4 (6)           | 5,000 (345)           | 24F743         | 24H663           |              | 24053        |
|                                  | Air/Water/<br>Anti-Freeze/<br>Windshield<br>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           |              | 24053        |
| 2 11 11 11                       |  | 1/2 (13)      | 35 (11)          | 1/2 (13)         | 1/2 (13)          | 1,800 (124)           | 24F760         | 24H662           |              | 24053        |
| Ceiling/Wall<br>Stationary Mount | Grease   | 1/4 (6)       | 35 (11)          | 3/8 (10)         | 1/4 (6)           | 5,000 (345)           | 24F761         | 24H663           |              | 24053        |
| -                                |  | 3/8 (10)      | 35 (11)          | 1/2 (13)         | 3/8 (10)          | 250 (17.2)            | 24F773         | 24H657           |              | 24C444       |
|                                  | Air/Water/<br>Anti-Freeze/                               | 3/8 (10)      | 50 (15)          | 1/2 (13)         | 3/8 (10)          | 250 (17.2)            | 24F774         | 24H658           |              |              |
|                                  | Windshield<br>Washer Fluid                               | 1/2 (13)      | 35 (11)          | 1/2 (13)         | 1/2 (13)          | 250 (17.2)            | 24F775         | 24H659           | 240772       |              |
|                                  | Washor Fluid   | 1/2 (13)      | 50 (15)          | 1/2 (13)         | 1/2 (13)          | 250 (17.2)            | 24F776         | 24H660           |              |              |
| C                                | 0:1  | 3/8 (10)      | 35 (11)          | 1/2 (13)         | 3/8 (10)          | 1,800 (124)           | 24F777         | 24H661           |              | 24053        |
|                                  | Oil  | 1/2 (13)      | 35 (11)          | 1/2 (13)         | 1/2 (13)          | 1,800 (124)           | 24F778         | 24H662           |              | 24053        |
| Bench Swivel Mount               | Grease   | 1/4 (6)       | 35 (11)          | 3/8 (10)         | 1/4 (6)           | 5,000 (345)           | 24F779         | 24H663           |              | 24053        |



# **LD Series Enclosed Hose Reels**

















## Ordering Information

#### **LD Series Reel**

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



| Fluid                      | Hose       |  | Connec   | tion Size      | Maximum Pressure | Part Number | Hose Inlet Kit     |  |
|----------------------------|------------|--|----------|----------------|------------------|-------------|--------------------|--|
| Fiulu                      | ID in (mm) | n (mm) Length ft (m) Inlet in (mm) Outle |          | Outlet in (mm) | psi (bar)        | Fait Number | (order separately) |  |
|                            | 3/8 (10)   | 35 (11)                                  | 1/2 (13) | 3/8 (10)       | 250 (17.2)       | 24H657      | 24C444             |  |
| Air/Water/<br>Anti-Freeze/ | 3/8 (10)   | 50 (15)                                  | 1/2 (13) | 3/8 (10)       | 250 (17.2)       | 24H658      | 24C444             |  |
| Windshield<br>Washer Fluid | 1/2 (13)   | 35 (11)                                  | 1/2 (13) | 1/2 (13)       | 250 (17.2)       | 24H659      | 24C444             |  |
| Washer Flaid               | 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             |  |
| Oll                        | 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<br>Pressure psi (bar) | Size<br>In (mm) | Inlet<br>Configuration | Outlet<br>Configuration | Part Number | Used with<br>Hose Reel Model |
|---|------------|---------------------------------------|-----------------|------------------------|-------------------------|-------------|------------------------------|
| • | Air Only   |                                       | 1/4 (6)         | 1/4 NPT(M)             | 1/4 NPT(M)              | 24C443      | 24H655 / 24H656              |
|   | Air/Water  | 250 (17.2)                            | 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)              | 240444      | 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                       |

















#### **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.



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 (six colors available) protects reel from corrosion.



Reel arm shown in tank/bench mount position.

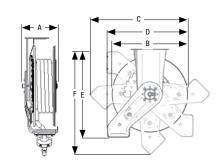
#### **Typical Applications**

- 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

| Dime | ensions          |                  |
|------|------------------|------------------|
|      | SD 10            | SD 20            |
| Α    | 7.0 in (177 mm)  | 7.0 in (177 mm)  |
| В    | 16.2 in (412 mm) | 18.1 in (460 mm) |
| С    | 21.0 in (533 mm) | 23.4 in (594 mm) |
| D    | 17.1 in (435 mm) | 19.2 in (488 mm) |
| Е    | 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   |















#### **Typical Mounting Configurations**





















#### SD 10/20 Reel Assembly Ordering Guide

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

| Reel Color    | Identifier |
|---------------|------------|
| White         | А          |
| Metallic Blue | В          |
| Red           | С          |
| Black         | D          |
| Dark Blue     | Е          |
| 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#



Select your reel color:

Metallic Blue = "B"

(from Reel Assembly Ordering Guide — opposite)

**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  | Fluid  | Но            | se               | Connec           | tion Size      | Maximum               | Assembly       | Recommended    |
|---|-------|--|---------------|------------------|------------------|----------------|-----------------------|----------------|----------------|
|   | Size  |  | ID<br>in (mm) | Length<br>ft (m) | Inlet<br>in (mm) | Outlet in (mm) | Pressure<br>psi (bar) | Part<br>Number | Hose Inlet Kit |
|   |       | Air/Water/<br>Anti-Freeze/<br>Windshield<br>Washer Fluid | 3/8 (10)      | 35 (11)          | 1/2 (13)         | 3/8 (10)       | 300 (20.7)            | HPL23#         |                |
|   | SD 10 |  | 3/8 (10)      | 50 (15)          | 1/2 (13)         | 3/8 (10)       | 300 (20.7)            | HPL25#         | 218549         |
|   |       |  | 1/2 (13)      | 35 (11)          | 1/2 (13)         | 1/2 (13)       | 300 (20.7)            | HPL33#         |                |
|   | CD 00 |  | 3/8 (10)      | 65 (20)          | 1/2 (13)         | 3/8 (10)       | 300 (20.7)            | HPL56#         |                |
|   | SD 20 |  | 1/2 (13)      | 50 (15)          | 1/2 (13)         | 1/2 (13)       | 300 (20.7)            | HPL65#         |                |
|   | SD 10 | 0.1  | 1/2 (13)      | 35 (11)          | 1/2 (13)         | 1/2 (13)       | 2,000 (138)           | HPM33#         |                |
|   | SD 20 | Oil  | 1/2 (13)      | 50 (15)          | 1/2 (13)         | 1/2 (13)       | 2,000 (138)           | HPM65#         |                |
| ¥ | CD 10 |  | 1/4 (6)       | 50 (15)          | 3/8 (10)         | 1/4 (6)        | 5,000 (345)           | HPH15#         | 218550         |
|   | SD 10 | Grease   | 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  | Fluid  | Но            | se               | Connec           | tion Size      | Maximum               | Assembly       | Recommended<br>Hose Inlet Kit |
|--|-------|--|---------------|------------------|------------------|----------------|-----------------------|----------------|-------------------------------|
|  | Size  |  | ID<br>in (mm) | Length<br>ft (m) | Inlet<br>in (mm) | Outlet in (mm) | Pressure<br>psi (bar) | Part<br>Number |                               |
|  | SD 20 | Air/Water/<br>Anti-Freeze/<br>Windshield<br>Washer Fluid | 3/8 (10)      | 65 (20)          | 1/2 (13)         | 3/8 (10)       | 300 (20.7)            | HPL5J#         |                               |
|  |       |  | 1/2 (13)      | 50 (15)          | 1/2 (13)         | 1/2 (13)       | 300 (20.7)            | HPL6H#         | 218549                        |
|  |       | Oil  | 1/2 (13)      | 50 (15)          | 1/2 (13)         | 1/2 (13)       | 2,000 (138)           | HPM6H#         |                               |
|  |       | Grease   | 3/8 (10)      | 50 (15)          | 3/8 (10)         | 1/4 (6)        | 4,800 (331)           | HPH5H#         | 218550                        |

















>>> Ordering Information

#### **Bare Reels**

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

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

|      | Reel  | Fluid  | Hose (Not     | Included)        | Connec           | tion Size         | Maximum               | Assembly       | Recommended    |
|------|-------|--|---------------|------------------|------------------|-------------------|-----------------------|----------------|----------------|
|      | Size  |  | ID<br>in (mm) | Length<br>ft (m) | Inlet<br>in (mm) | Outlet<br>in (mm) | Pressure<br>psi (bar) | Part<br>Number | Hose Inlet Kit |
|      | SD 10 |  | 3/8 (10)      | 50 (15)          | 1/2 (13)         | 3/8 (10)          | 300 (20.7)            | HPL2D#         |                |
|      | 30 10 | Air/Water/<br>Anti-Freeze/<br>Windshield<br>Washer Fluid | 1/2 (13)      | 35 (11)          | 1/2 (13)         | 3/8 (10)          | 300 (20.7)            | HPL2D#         |                |
| 2/30 | SD 20 |  | 3/8 (10)      | 65 (20)          | 1/2 (13)         | 1/2 (13)          | 300 (20.7)            | HPL6D#         | 218549         |
|      | 3D 20 |  | 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 | UII  | 1/2 (13)      | 50 (15)          | 1/2 (13)         | 1/2 (13)          | 2,000 (138)           | HPM6D#         |                |
|      | CD 10 |  | 1/4 (6)       | 50 (15)          | 3/8 (10)         | 3/8 (10)          | 5,000 (345)           | HPH1D#         | 218550         |
|      | SD 10 | Grease   | 3/8 (10)      | 35 (11)          | 3/8 (10)         | 3/8 (10)          | 5,000 (345)           | HPH1D#         |                |
| W    | SD 20 |  | 3/8 (10)      | 50 (15)          | 3/8 (10)         | 3/8 (10)          | 5,000 (345)           | HPH5D#         |                |



















#### **SD 10 Oil Reel Packages**

|             | Reel Size | Fluid  | Valve Type                                   | Enclosure  | Package |               | Package   | Includes       |        |
|-------------|-----------|--------|--|------------|---------|---------------|-----------|----------------|--------|
|             | Neel Size | i iuiu |  | LIIGIOSUIE | Number  | Reel Assembly | Enclosure | Hose Inlet Kit | Meter  |
| <b>1</b> 95 | SD 10     | Oil    | SDM5 Manual Meter<br>with Rigid Extension    | No         | 24E001  | НРМЗЗВ        | -         | 218549         | 25M404 |
| 1           |           |        |  | Yes        | 24D996  | НРМЗЗВ        | 24A217    | 218549         | 25M404 |
|             |           |        | SDM5 Manual Meter<br>with Flexible Extension | No         | 24E002  | НРМЗЗВ        | -         | 218549         | 25M406 |
|             |           |        |  | Yes        | 24D997  | НРМЗЗВ        | 24A217    | 218549         | 25M406 |
| Q           |           |        | None   | Yes        | 24D995  | НРМЗЗВ        | 24A217    | 218549         | _      |

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

|     | D. J.O.   | F1 :-1    | V-I - T                        | F. d      | Package |               |           | Package Includes | 3      |         |
|-----|-----------|-----------|--------------------------------|-----------|---------|---------------|-----------|------------------|--------|---------|
|     | Reel Size | Fluid     | Valve Type                     | Enclosure | Number  | Reel Assembly | Enclosure | Hose Inlet Kit   | Valve  | Fitting |
|     |           |           |                                | No        | 24D999  | HPL23B        | -         | 218549           | 180685 | 150287  |
|     |           | Water     | Water Bib<br>Dispense<br>Valve | Yes -     | 24D993  | HPL23B        | 24A217    | 218549           | 180685 | 150287  |
| 000 |           |           |                                |           | 24D994  | HPL33B        | 24A217    | 218549           | 180685 | 159842  |
|     | SD 10     | A:-       | Tire Chuck<br>Valve            | No        | 24D998  | HPL23B        | -         | 218549           | 218545 | -       |
|     |           | Air       |                                | Yes       | 24D992  | HPL23B        | 24A217    | 218549           | 218545 | -       |
|     |           | Air/Water |                                |           | 24D989  | HPL23B        | 24A217    | 218549           | -      | -       |
|     |           |           | None                           | Yes -     | 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<br>Blue | Red    | Black  | Dark Blue | Yellow | Required End-Caps<br>(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<br>Pressure psi (bar) | Size<br>in (mm) | Length<br>ft (m) | Part Number |
|-----|---------------------------------------|-----------------|------------------|-------------|
|     | 2,000 (137)                           | 1/2 (13)        |                  | 218549      |
| No. | 4,000 (276)                           | 3/8 (10)        | 2 (0.6)          | 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  |  |
| D | Open Reel Mounting Channel     | 24A934       | 24A935  | 24A936  | 24A937       | 24A938  | 24A939  |  |
|   | I-Beam Mounting Bracket*       | 204741 (x 2) |         |         | 204741 (x 3) |         |         |  |

<sup>\*</sup>Secures mounting channel to I-beam without drilling – 2 are required for 1-3 reels, and 3 are required for 4-6 reels.





















#### **Swivel Mounting Bracket**

Allows reel to swivel 120° with two lockable positions.

| Part Number | Description  |
|-------------|--|
| 24N444      | Swivel mounting bracket for installing 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 |
|----------|-------------|-------------|
| () GRACO | 17\$659     | Red         |
| () GRACO | 17S660      | Blue        |
| O GRACO  | 17S661      | Green       |
| O GRACO  | 17\$662     | Yellow      |
| O GRACO  | 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.



#### **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.

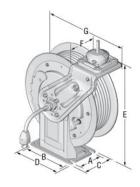
#### Multiple Configurations Available

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.

#### **Typical Applications**

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

| im | imensions |                   |                  |  |  |  |
|----|-----------|-------------------|------------------|--|--|--|
|    |           | SD Series 5       | SD Series 10     |  |  |  |
|    | Α         | 3.5 in (89 mm)    | 3.5 in (89 mm)   |  |  |  |
|    | В         | 6.38 in (162 mm)  | 7.5 in (191 mm)  |  |  |  |
|    | С         | 4.7 in (120 mm)   | 4.7 in (120 mm)  |  |  |  |
|    | D         | 7.48 in (190 mm)  | 9 in (229 mm)    |  |  |  |
|    | Е         | 14.8 in (376 mm)  | 19.5 in (498 mm) |  |  |  |
|    | F         | 6.6 in (168 mm)   | 7 in (177 mm)    |  |  |  |
|    | G         | 13.84 in (352 mm) | 17.5 in (445 mm) |  |  |  |





| U | chilical Specifications |        |                      |                                   |  |  |  |
|---|-------------------------|--------|----------------------|-----------------------------------|--|--|--|
|   | Ope                     | rating | Temperature Range    |                                   |  |  |  |
|   |                         | Cord   | Reels                | -22°F to 122°F<br>(-30°C to 50°C) |  |  |  |
|   |                         | Ligh   | t Reels              | -4°F to 104°F<br>(-20°C to 40°C)  |  |  |  |
|   | Weig                    | ght wi | thout Accessories    |                                   |  |  |  |
|   |                         | SD 5   | 16 AWG, Length 35 ft | 25.4 lb                           |  |  |  |
|   |                         |        | 16 AWG, Length 50 ft | 27.6 lb                           |  |  |  |
|   | 120V                    |        | 12 AWG, Length 35 ft | 28.2 lb                           |  |  |  |
|   | 12                      |        | 12 AWG, Length 50 ft | 32.0 lb                           |  |  |  |
|   |                         | SD 10  | 16 AWG, Length 95 ft | 46.3 lb                           |  |  |  |
|   |                         |        | 12 AWG, Length 95 ft | 51.8 lb                           |  |  |  |
|   | Instr                   | uction | n Manual             | 3A2592                            |  |  |  |

**UL/CSA** Approved





#### SD Cord and Light Reels – 120 Volt

120 volt cord and light reels have a black finish and are UL/CSA approved.

|            | Accessory                                      | Reel Size | AWG | Amp | Cord Length  | Insulation | Part Number |
|------------|--|-----------|-----|-----|--------------|------------|-------------|
|            |  | SD 5      | 12  | 20  | 50 ft (15 m) | SJ00W      | 24Y859      |
|            | No Accessory –<br>Cord Only                    | SD 10     | 12  | 18  | 95 ft (29 m) | SJOOW      | 24Y880      |
|            |  | SD 5      | 16  | 13  | 50 ft (15 m) | SJTOW      | 24Y861      |
|            |  | SD 5      | 12  | 20  | 35 ft (11 m) | SJ00W      | 24Y862      |
|            | Single Industrial<br>Receptacle                | SD 5      | 12  | 20  | 50 ft (15 m) | SJ00W      | 24Y863      |
|            | Ποσοριασίο                                     | SD 10     | 12  | 18  | 95 ft (29 m) | SJ00W      | 24Y882      |
|            | Tri-Plug GFCI<br>Industrial Receptacle         | SD 5      | 12  | 15  | 50 ft (15 m) | SJ00W      | 24Y864      |
|            |  | SD 10     | 12  | 15  | 95 ft (29 m) | SJ00W      | 24Y883      |
|            | Fluorescent Light                              | SD 5      | 16  | <1  | 35 ft (11 m) | SJTOW      | 24Y865      |
| () Bleve   |  | SD 5      | 16  | <1  | 50 ft (15 m) | SJTOW      | 24Y866      |
| 9          |  | SD 10     | 16  | <1  | 95 ft (29 m) | SJTOW      | 24Y884      |
| Guerra     | Fluorescent Light with<br>Single Tool Tap Plug | SD 5      | 16  | 10  | 50 ft (15 m) | SJTOW      | 24Y868      |
|            |  | SD 5      | 16  | <1  | 35 ft (11 m) | SJTOW      | 24Y869      |
| () to beau | LED Light                                      | SD 5      | 16  | <1  | 50 ft (15 m) | SJT0W      | 24Y870      |
|            |  | SD 10     | 16  | <1  | 95 ft (29 m) | SJT0W      | 24Y886      |
|            |  | SD 5      | 16  | 12  | 35 ft (11 m) | SJTOW      | 24Y871      |
| Grand      | LED Light with<br>In-line Tool Tap             | SD 5      | 16  | 12  | 50 ft (15 m) | SJTOW      | 24Y872      |
| 3          | ·  | 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<br>Blue | Red    | Black  | Dark Blue | Yellow | Required End-Caps<br>(set of 2) |
|---------------------------------|--------|------------------|--------|--------|-----------|--------|---------------------------------|
| SD 5<br>with size 10 enclosure  | 24N690 | 24N682           | 24N683 | 24N684 | 24N691    | 24N685 | 24A950                          |
| SD 10<br>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<br>Mounting Channel | SD 5 and SD 10 | 203521       | 203522  | 203523       | 203524  | 203525  | 203526  |
| 100                         | Open Reel<br>Mounting Channel     | SD 5           | 24N674       | 24N675  | -            | -       | -       | -       |
|                             |                                   | SD 10          | 24A934       | 24A935  | 24A936       | 24A937  | 24A938  | 24A939  |
| I-Beam<br>Mounting Bracket* |                                   | SD 5 and SD 10 | 204741 (x 2) |         | 204741 (x 3) |         |         |         |

<sup>\*</sup>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.

| <br>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



#### **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 (four colors available) protects reel from corrosion.

#### Large Hose Capacity with Small Profile

Compact pedestal and spool fits into tight spaces and can accommodate 35-65 foot (10.7-19.8 meters) hose capacity for a wide variety of applications.

#### **Typical Applications**

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

#### Typical Fluids Handled

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

#### **Technical Specifications**

| Operating Temperature Range                       |  |  |  |  |
|---|--|--|--|--|
| Air/Water/Anti-Freeze/<br>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/<br>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   |  |  |  |















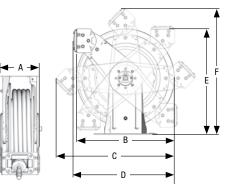




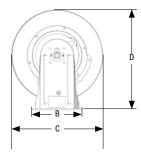
10 / 20 / 20 HN

| Dime | Dimensions       |                         |                  |  |  |  |  |  |  |
|------|------------------|-------------------------|------------------|--|--|--|--|--|--|
|      | HS Models (with  | HN Models (without Arm) |                  |  |  |  |  |  |  |
|      | XD 10            | XD 20                   | XD 20            |  |  |  |  |  |  |
| Α    | 7.5 in (196 mm)  | 7.5 in (196 mm)         | 7.5 in (196 mm)  |  |  |  |  |  |  |
| В    | 16.2 in (412 mm) | 18.1 in (460 mm)        | 18.1 in (460 mm) |  |  |  |  |  |  |
| С    | 21.0 in (533 mm) | 23.4 in (594 mm)        | 23.4 in (594 mm) |  |  |  |  |  |  |
| D    | 18.0 in (457 mm) | 20.0 in (508 mm)        | 20.0 in (508 mm) |  |  |  |  |  |  |
| Е    | 18.5 in (470 mm) | 21.0 in (533 mm)        | 21.0 in (533 mm) |  |  |  |  |  |  |
| F    | 22.5 in (571 mm) | 25.2 in (640 mm)        | 25.2 in (640 mm) |  |  |  |  |  |  |





#### **HN Models**



#### **Typical Mounting Configurations**



#### **XD Series Hose Reels**















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#### XD 10/20 Reel Assembly Ordering Guide

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

| Reel Color    | Identifier |
|---------------|------------|
| White         | А          |
| Metallic Blue | В          |
| Yellow        | F          |
| Desert Sand*  | G          |

\*Desert Sand not available on HN Models.

**Order Example:** 

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

1 Select your reel position:

**HSM65**#

Select your reel color:
(from Reel Assembly Ordering

Metallic Blue = "B"

Guide – opposite)

**Order Part Number:** 

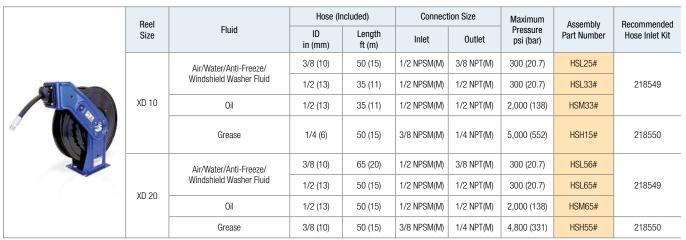
HSM65B



#### HS Models (with Adjustable Arm)

#### **Reel Assemblies**

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



#### **Bare Reels**

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



| Reel  |   | Hose (Not Included) |                  | Connect     | tion Size   | Maximum               | Part   | Recommended    |  |
|-------|---|---------------------|------------------|-------------|-------------|-----------------------|--------|----------------|--|
| Size  | Fluid   | ID<br>in (mm)       | Length<br>ft (m) | Inlet       | Outlet      | Pressure<br>psi (bar) | Number | Hose Inlet Kit |  |
|       | Air/Water/Anti-Freeze/<br>Windshield Washer Fluid | 3/8 (10)            | 65 (20)          | 1/2 NPSM(M) | 3/8 NPSM(F) | 300 (20.7)            | HSL2D# | 218549         |  |
| XD 10 | 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)           | HSH1D# | 218550         |  |
|       | Air/Water/Anti-Freeze/<br>Windshield Washer Fluid | 1/2 (13)            | 50 (15)          | 1/2 NPSM(M) | 1/2 NPSM(F) | 300 (20.7)            | HSL6D# | 218549         |  |
| XD 20 | Oil   | 1/2 (13)            | 50 (15)          | 1/2 NPSM(M) | 1/2 NPSM(F) | 2,000 (138)           | HSM6D# | 210040         |  |
|       | Grease  | 3/8 (10)            | 50 (15)          | 3/8 NPSM(M) | 3/8 NPSM(F) | 8,000 (552)           | HSH5D# | 218550         |  |

















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#### >>> Ordering Information

#### HN Models (without Adjustable Arm)

Required hose inlet kit sold separately.



| Reel       |                            | Hose (Included) |                  | Connect     | ion Size   | Maximum               | Bare Reel,                   | Recommended    |
|------------|----------------------------|-----------------|------------------|-------------|------------|-----------------------|------------------------------|----------------|
| Size Fluid | Fluid                      | ID<br>in (mm)   | Length<br>ft (m) | Inlet       | Outlet     | Pressure<br>psi (bar) | Hose Assembly<br>Part Number | Hose Inlet Kit |
|            | Air/Water/<br>Anti-Freeze/ | 3/8 (10)        | 65 (20)          | 1/2 NPSM(M) | 3/8 NPT(M) | 300 (20.7)            | HNL56#                       |                |
|            | Windshield<br>Washer Fluid | 1/2 (13)        | 50 (15)          | 1/2 NPSM(M) | 1/2 NPT(M) | 300 (20.7)            | HNL65#                       | 218549         |
| XD 20      | Oil                        | 1/2 (13)        | 50 (15)          | 1/2 NPSM(M) | 1/2 NPT(M) | 2,000 (138)           | HNM65#                       |                |
|            | Grease                     | 3/8 (10)        | 50 (15)          | 3/8 NPSM(M) | 1/4 NPT(M) | 4,800 (331)           | HNH55#                       | 218550         |

#### HN Model Specialty Packages (without Adjustable Arm)

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



| Reel  | Fluid                      | Hose (Included) |                  | Connection Size |            | Maximum               | Part Number      |        |        | Hose                    | Recommended    |
|-------|----------------------------|-----------------|------------------|-----------------|------------|-----------------------|------------------|--------|--------|-------------------------|----------------|
| Size  |                            | ID<br>in (mm)   | Length<br>ft (m) | Inlet           | Outlet     | Pressure<br>psi (bar) | Metallic<br>Blue | White  | Yellow | Guide Kit<br>(Included) | Hose Inlet Kit |
|       | Air/Water/<br>Anti-Freeze/ | 3/8 (10)        | 65 (20)          | 1/2 NPSM(M)     | 3/8 NPT(M) | 300 (20.7)            | 24C246           | 24C245 | 24C247 |                         |                |
| XD 20 | Windshield<br>Washer Fluid | 1/2 (13)        | 50 (15)          | 1/2 NPSM(M)     | 1/2 NPT(M) | 300 (20.7)            | 24C249           | 24C248 | 24C250 | 15Y478                  | 218549         |
|       | 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         |

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















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#### >>> 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<br>Pressure psi (bar) | Size<br>in (mm) | Length<br>ft (m) | Part Number |
|-----|---------------------------------------|-----------------|------------------|-------------|
|     | 2,000 (137)                           | 1/2 (13)        |                  | 218549      |
| 110 | 4,000 (276)                           | 3/8 (10)        | 2 (0.6)          | 218550      |
|     | 5,000 (345)                           | 1/4 (6)         |                  | 224417      |

#### **Mounting Channels**

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



















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#### **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<br>Blue | Red    | Black  | Dark Blue | Yellow | Required End-Caps<br>(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 |
| 3 | 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**

| C ANTI-PROCES C HYDRAUGE<br>C ANTI-ON C ATT   | Part Number | Description  |
|---|-------------|--|
| C SAE SON C DESIGNED  C SAE SON C COMMONS  C SAE SON C WATER  C SAE SON C GRAP  C SAE SON C AIR | 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 |
|----------|-------------|-------------|
| () GRACO | 17\$659     | Red         |
| 0 GRACO  | 17\$660     | Blue        |
| O GRACO  | 17S661      | Green       |
| O GRACO  | 17\$662     | Yellow      |
| OGRACO   | 17S663      | White       |



#### **XD Series Hose Reels**

























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#### **High Capacity Reel**

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



Increase or decrease spring tension while reel is pressurized with fluid.

#### **Full-Flow Swivel**

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

#### Optional Adjustable Arm

Easily change to one of seven arm positions to fit your application. Order with arm (HS models) or without (HN models).

#### **Durable Finish**

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

#### Large Hose Capacity with Small Profile

Compact pedestal and spool fits into tight spaces and can accommodate 30-75 foot (9.1-22.8 meters) hose capacity for a wide variety of applications.

#### **Typical Applications**

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

#### Typical Fluids Handled

- Petroleum- and synthetic-based oils (motor, gear and ATF)
- Diesel fuel
- Air
- Water
- Grease
- Anti-freeze
- Windshield washer fluid
- Pressure wash
- · Waste oil evacuation
- · Diesel exhaust fluid (DEF)

#### **Technical Specifications**

| Operating Temperature Range                             |   |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|
| Air/Water/Anti-Freeze/<br>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/<br>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  |  |  |  |  |  |  |























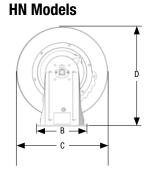


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| Dime | Dimensions                      |                         |  |  |  |  |  |  |
|------|---------------------------------|-------------------------|--|--|--|--|--|--|
|      | HS Models (with Adjustable Arm) | HN Models (without Arm) |  |  |  |  |  |  |
| Α    | 9.0 in (229 mm)                 | 7.5 in (196 mm)         |  |  |  |  |  |  |
| В    | 21.5 in (546 mm)                | 18.1 in (460 mm)        |  |  |  |  |  |  |
| С    | 26.0 in (659 mm)                | 23.4 in (594 mm)        |  |  |  |  |  |  |
| D    | 22.1 in (562 mm)                | 20.0 in (508 mm)        |  |  |  |  |  |  |
| Е    | 23.1 in (588 mm)                | 21.0 in (533 mm)        |  |  |  |  |  |  |
| F    | 27.6 in (701 mm)                | 25.2 in (640 mm)        |  |  |  |  |  |  |

# HS Models

## A -



#### **Typical Mounting Configurations**



#### **XD Series Hose Reels**





















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

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

| Reel Color    | Identifier |
|---------------|------------|
| White         | А          |
| Metallic Blue | В          |
| Yellow        | F          |
| Desert Sand*  | G          |

\*Desert Sand not available on HN Models.

**Order Example:** 

Arm in overhead mount position, XD 30, oil, 3/4 in ID hose, 50 ft hose length

1 Select your reel position:

HSMD5#

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.



#### **Bare Reels**

Required hose inlet kit sold separately.



|               | Hose (Not Included) |                  | Connection Size  |                   | Maximum               |             | Recommended    |
|---------------|---------------------|------------------|------------------|-------------------|-----------------------|-------------|----------------|
| Fluid         | ID<br>in (mm)       | Length<br>ft (m) | Inlet<br>in (mm) | Outlet<br>in (mm) | Pressure<br>psi (bar) | Part Number | Hose Inlet Kit |
| Oil           | 1/2 (13)            | 75 (23)          | 1/2 (13) (m)     | 1/2 (13) (m)      | 2,000 (138)           | HSMCF#      | 218549         |
| Oil           | 3/4 (19)            | 50 (15)          | 3/4 (19) (m)     | 3/4 (19) (m)      | 2,000 (138)           | HSMDD#      | 24E284         |
| Grease        | 1/2 (13)            | 50 (15)          | 1/2 (13) (m)     | 1/2 (13) (m)      | 5,000 (345)           | HSHCD#      | 24E283         |
| Pressure Wash | 3/8 (10)            | 75 (23)          | 1/2 (13) (m)     | 3/8 (10) (m)      | 4,000 (276)           | HSHFF#      | 24E283         |
| DEF           | 3/4 (19)            | 50 (15)          | 3/4 (19) (m)     | 3/4 (19) ORB      | 50 (3.4)              | HSDDD#      | 24W250 (BSPP)  |























#### **XD Series Hose Reels**

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#### HN Models (without Adjustable Arm)

#### **Reels with Hose**

Required hose inlet kit sold separately.



|                         | Hose (Included) |                  | Connection Size |            | Maximum               | Reel and Hose           | Recommended    |
|-------------------------|-----------------|------------------|-----------------|------------|-----------------------|-------------------------|----------------|
| Fluid                   | ID<br>in (mm)   | Length<br>ft (m) | Inlet           | Outlet     | Pressure<br>psi (bar) | Assembly<br>Part Number | Hose Inlet Kit |
| Air/Water/Anti-Freeze/  | 1/2 (13)        | 75 (23)          | 1/2 NPSM(M)     | 1/2 NPT(M) | 300 (20.7)            | HNLC8#                  | 218549         |
| Windshield Washer Fluid | 3/4 (19)        | 50 (15)          | 3/4 NPSM(M)     | 3/4 NPT(M) | 300 (20.7)            | HNLD5#                  | 24E284         |
| Oil                     | 1/2 (13)        | 75 (23)          | 1/2 NPSM(M)     | 1/2 NPT(M) | 1,500 (103)           | HNMC8#                  | 218549         |
| Oil                     | 3/4 (19)        | 50 (15)          | 3/4 NPSM(M)     | 3/4 NPT(M) | 1,250 (86)            | HNMD5#                  | 24E284         |
| 0                       | 1/2 (13)        | 50 (15)          | 1/2 NPSM(M)     | 1/2 NPT(M) | 5,000 (345)           | HNHC5#                  | 24E283         |
| Grease                  | 3/8 (10)        | 75 (23)          | 1/2 NPSM(M)     | 3/8 NPT(F) | 5,000 (345)           | HNHB7#                  | 24E283         |
| Dunanium Wash           | 3/8 (10)        | 75 (23)          | 1/2 NPSM(M)     | 3/8 NPT(M) | 4,000 (276)           | HNPB8#                  | 24E283         |
| Pressure Wash           | 1/2 (13)        | 50 (15)          | 1/2 NPSM(M)     | 1/2 NPT(M) | 4,500 (310)           | HNPC5#                  | 24E283         |
| Fuel 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.



|               | Hose (Not Included) |                  | Connection Size  |                   | Maximum               |             | Recommended    |
|---------------|---------------------|------------------|------------------|-------------------|-----------------------|-------------|----------------|
| Fluid         | ID<br>in (mm)       | Length<br>ft (m) | Inlet<br>in (mm) | Outlet<br>in (mm) | Pressure<br>psi (bar) | Part Number | Hose Inlet Kit |
| Oil           | 3/4 (19)            | 50 (15)          | 3/4 (19) (m)     | 3/4 (19) (m)      | 2,000 (138)           | HNMDD#      | 24E284         |
| Grease        | 1/2 (13)            | 50 (15)          | 1/2 (13) (m)     | 1/2 (13) (m)      | 5,000 (345)           | HNHCD#      | 24E283         |
| Pressure Wash | 3/8 (10)            | 75 (23)          | 1/2 (13) (m)     | 3/8 (10) (m)      | 4,000 (276)           | HNHFF#      | 24E283         |

#### **Ball Stop Kits**

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



| Part Number | Description  |
|-------------|--|
| 222225      | For 1/4 in (6 mm) ID hose (not compatible with 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



#### **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<br>24E285 | 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 |
| 113 II |                  | 1/2 in (13 mm) hose inlet kit for fuel. 125 psi (8.6 bar), 1/4 in NPT hose inlet ID, 24 in (610 mm) long                      |
|        | 24W250           | 2 ft DEF inlet hose kit for XD 30 reels. 3/4 in BSPP(F) x cut end and 90° elbow   |
|        | 24W251           | 6 ft DEF inlet hose kit for XD 30 reels. 3/4 in BSPP(F) x cut end and 90° elbow   |
|        | 124875           | 2 ft DEF hose, 3/4 in BSPP(M) x cut end (inlet hose)  |
|        | 124581           | 6 ft DEF hose, 3/4 in BSPP(M) x cut end (inlet hose)  |

#### **Valve Hanger Kit**

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

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

| C ANTI-PRESE C HISPARIC   | Part Number | Description  |
|---|-------------|--|
| C SAC 1990 C CONSTRU<br>C SAC 1990 C CONSTRU<br>C SAC 1990 C CONSTRU<br>C SAC 1990 C COSAN<br>C SAC 2090 C COSAN<br>C SAC 2090 C AR | 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 |
|----------|-------------|-------------|
| () GRACO | 17S659      | Red         |
| () GRACO | 17S660      | Blue        |
| O GRACO  | 17S661      | Green       |
| O GRACO  | 17S662      | Yellow      |
| O GRACO  | 17S663      | White       |



40 / 50



















#### **Built-In Toughness**

Engineered to take a beating and still reliably perform in harsh environments so it's ready when you need it. Choose from more colors, thread types and hoses or choose the bare reel so you can customize it with your hose. You get a professional look, easier fit and better-performing equipment.

#### Extensive Hose Offering

Standard models come complete with factory-installed hoses on the reel. Large selection of optional reels to fit various applications.

#### Full-Flow Swivel

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

#### Rugged and Durable Body

Heavy-duty welded spool and ribbed frame for extra strength and toughness over the long haul.

#### Meets Worldwide Needs

Built standard with 90° elbow with NPT, BSPP or BSPT threads. 1-1/2 in models also include 2 in Victaulic<sup>™</sup>\*-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 -20°F to 180°F (-28°C to 82°C) Oil Reels – 1 inch All Other Reels -40°F to 180°F (-40°C to 82°C) Carbon steel, nickel plated cast iron, Buna-N rubber, Wetted Parts FKM UHMWPE Maximum Recommended 15 ft (4.6 m) Mounting Height Sound Pressure Level 77.6 dB(A) Sound Power Level 86.8 dB(A)

#### How to Select an XD 40/50 Hose Reel

#### 2 Ways to Order!

#### Option 1 - Reel with Hose

(Pages 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 Ki

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



#### **Hose Inlet Kit**

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



#### **Ball Stop Kit**

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



#### **Support Arm**

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



#### **Mounting Kit**

Overhead mounting options available for XD 40 reels.









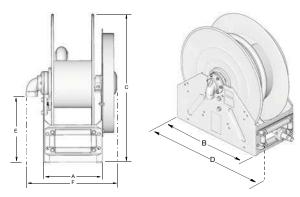












| Dimensions        |                       |             |            |             |            |             |             |
|-------------------|-----------------------|-------------|------------|-------------|------------|-------------|-------------|
| Madal             | Inlet/Outlet Size     |             |            | Dimension   | s in (mm)* |             |             |
| wodei             | Model NPT(F)          | А           | В          | С           | D          | Е           | F           |
| XD 4010 – Model 1 | 1 in/1 in             | 11.83 (300) | 24 (610)   | 26.13 (664) | 26.4 (671) | 10.91 (277) | 16.54 (420) |
| XD 4010 – Model 2 | 1 in/1 in             | 11.83 (300) | 24 (610)   | 26.13 (664) | 26.4 (671) | 10.91 (277) | 17.47 (444) |
| XD 5010           | 1 in/1 in             | 11.83 (300) | 28.5 (724) | 30.13 (765) | 29.4 (747) | 10.91 (277) | 17.4 (444)  |
| XD 5015           | 1-1/2 in/<br>1-1/2 in | 11.83 (300) | 28.5 (724) | 30.13 (765) | 29.4 (747) | 10.91 (277) | 18.24 (463) |

<sup>\*</sup>For complete list of dimensions, see Graco product manual 3A2990.

#### **Typical Mounting Configurations**



#### **XD Series Hose Reels**















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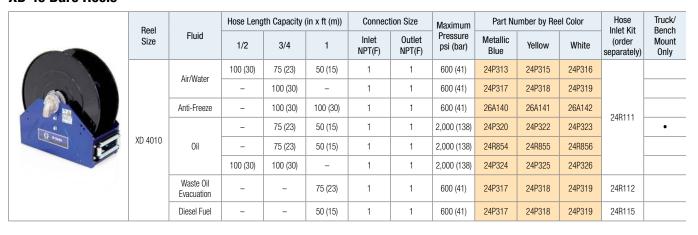
#### Ordering Information

#### **XD 40 Reels with Hose**

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

|  | Reel    |                         | Ho            | se               | Connect         | tion Size        | Maximum               | Part N           | umber by Ree | l Color | Hose<br>Inlet Kit     | Truck/Bench   |
|--|---------|-------------------------|---------------|------------------|-----------------|------------------|-----------------------|------------------|--------------|---------|-----------------------|---------------|
|  | Size    | Fluid                   | ID<br>in (mm) | Length<br>ft (m) | Inlet<br>NPT(F) | Outlet<br>NPT(M) | Pressure<br>psi (bar) | Metallic<br>Blue | Yellow       | White   | (Order<br>Separately) | Mount<br>Only |
|  |         |                         | 1/2 (13)      | 100 (30)         | 1               | 1/2              | 300 (21)              | 24P327           | 24P328       | 24P329  |                       |               |
|  |         | Air/Water               | 3/4 (19)      | 75 (23)          | 1               | 3/4              | 300 (21)              | 24P330           | 24P331       | 24P332  |                       |               |
|  |         | All/Water               | 3/4 (19)      | 100 (30)         | 1               | 3/4              | 300 (21)              | 24P333           | 24P334       | 24P335  |                       |               |
|  |         |                         | 1 (25)        | 50 (15)          | 1               | 1                | 300 (21)              | 24P336           | 24P337       | 24P338  |                       |               |
|  |         | Anti-Freeze             | 3/4 (19)      | 100 (30)         | 1               | 3/4              | 300 (21)              | 24P984           | 24P985       | 24P986  |                       |               |
|  |         | 0 4010<br>Oil           | 1/2 (13)      | 100 (30)         | 1               | 1/2              | 2,000 (138)           | 24P339           | 24P340       | 24P341  | 24R111                |               |
|  | XD 4010 |                         | 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<br>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**





















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#### >>> Ordering Information

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

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

|          | Reel      |             | Ho            | se               | Connect         | tion Size        | Maximum               | Part N           | umber by Ree | l Color | Hose<br>Inlet Kit     |
|----------|-----------|-------------|---------------|------------------|-----------------|------------------|-----------------------|------------------|--------------|---------|-----------------------|
|          | Size      | Fluid       | ID<br>in (mm) | Length<br>ft (m) | Inlet<br>NPT(F) | Outlet<br>NPT(M) | Pressure<br>psi (bar) | Metallic<br>Blue | Yellow       | White   | (Order<br>Separately) |
|          |           | Air/Water   | 1 (25)        | 75 (23)          | 1               | 1                | 300 (21)              | 24P470           | 24P471       | 24P472  |                       |
|          |           | All/Water   | 1 (25)        | 100 (30)         | 1               | 1                | 300 (21)              | 24P473           | 24P474       | 24P475  | 040444                |
|          | VD 5010   | Anti-Freeze | 1 (25)        | 100 (30)         | 1               | 1                | 300 (21)              | 24P987           | 24P988       | 24P989  | 24R111                |
| SALA III | XD 5010   | Oil         | 1 (25)        | 75 (23)          | 1               | 1                | 1,275 (88)            | 24P476           | 24P477       | 24P478  |                       |
| 100      |           | Diesel Fuel | 1 (25)        | 75 (23)          | 1               | 1                | 250 (17)              | 24P485           | 24P486       | 24P487  | 040445                |
| (B)      |           |             | 1 (25)        | 100 (30)         | 1               | 1                | 250 (17)              | 24P488           | 24P489       | 24P490  | 24R115                |
|          |           | Waste Oil   | 1-1/4 (32)    | 35 (11)          | 1-1/2           | 1-1/4            | 200 (14)              | 24P479           | 24P480       | 24P481  |                       |
|          |           | Evacuation  | 1-1/4 (32)    | 50 (15)          | 1-1/2           | 1-1/4            | 200 (14)              | 24P482           | 24P483       | 24P484  | _                     |
|          | XD 5015** |             | 1-1/4 (32)    | 35 (11)          | 1-1/2           | 1-1/4            | 250 (17)              | 24P491           | 24P492       | 24P493  |                       |
|          |           | Diesel Fuel | 1-1/4 (32)    | 50 (15)          | 1-1/2           | 1-1/4            | 250 (17)              | 24P494           | 24P495       | 24P496  | 24R117                |
|          |           |             | 1-1/2 (38)    | 50 (15)          | 1-1/2           | 1-1/2            | 150 (10)              | 24P497           | 24P498       | 24P499  |                       |

<sup>\*\*</sup>Standard 2 inch Vitaulic™-style groove on inlet.

#### **XD 50 Bare Reels**

|         | Pool      | Reel                    |          | Hose Length Capacity (in x ft (m)) |         | Connection Size |                  | Maximum               | Part Number by Reel Color |        |        | Hose<br>Inlet Kit     |
|---------|-----------|-------------------------|----------|------------------------------------|---------|-----------------|------------------|-----------------------|---------------------------|--------|--------|-----------------------|
|         | Size      |                         | 1        | 1-1/4                              | 1-1/2   | Inlet<br>NPT(F) | Outlet<br>NPT(F) | Pressure<br>psi (bar) | Metallic<br>Blue          | Yellow | White  | (order<br>separately) |
|         |           | Air/Water               | 100 (30) | -                                  | _       | 1               | 1                | 600 (41)              | 24P455                    | 24P456 | 24P457 |                       |
|         |           | Anti-Freeze             | 100 (30) | -                                  | -       | 1               | 1                | 600 (41)              | 26A143                    | 26A144 | 26A145 | 24R111                |
|         | XD 5010   | Oil                     | 75 (23)  | -                                  | -       | 1               | 1                | 2,000 (138)           | 24P458                    | 24P459 | 24P460 |                       |
|         |           | Diesel Fuel             | 100 (30) | -                                  | -       | 1               | 1                | 600 (41)              | 24P455                    | 24P456 | 24P457 | 24R115                |
| ( ) E   |           |                         | 75 (23)  | -                                  | -       | 1               | 1                | 600 (41)              | 24P464                    | 24P465 | 24P466 | 248110                |
| XD 5015 |           | Waste Oil<br>Evacuation | _        | 50 (15)                            |         | 1-1/2           | 1-1/2            | 600 (41)              | 24P461                    | 24P462 | 24P463 | -                     |
|         | XD 5015** | XD 5015** Diesel Fuel   | -        | 50 (15)                            | _       | 1-1/2           | 1-1/2            | 600 (41)              | 24P461                    | 24P462 | 24P463 | 040117                |
|         |           |                         | -        | 50 (15)                            | 50 (15) | 1-1/2           | 1-1/2            | 600 (41)              | 24P467                    | 24P468 | 24P469 | 24R117                |

<sup>\*\*</sup>Standard 2 inch Vitaulic™-style groove on inlet.

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



Victaulic is a trademark of Victaulic Company of America.



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













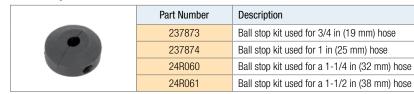


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#### Ordering Information

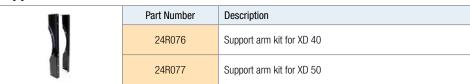
#### **Ball Stop Kits**



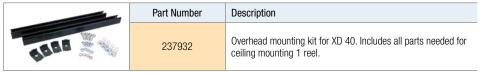
#### **Hose Guides**

| <br>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**



#### **Mounting Kit**



#### **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  |
| ENG. | 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**

| C mines C man   | Part Number | Description  |
|---|-------------|--|
| C SAC 1000 C COMMON C SAC ON C COMMON C SAC ON C COMMON C SAC SON | 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 |
|----------|-------------|-------------|
| () GRACO | 17S659      | Red         |
| 0 GRACO  | 17S660      | Blue        |
| 0 GRACO  | 17S661      | Green       |
| O GRACO  | 17S662      | Yellow      |
| O GRACO  | 17S663      | White       |



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













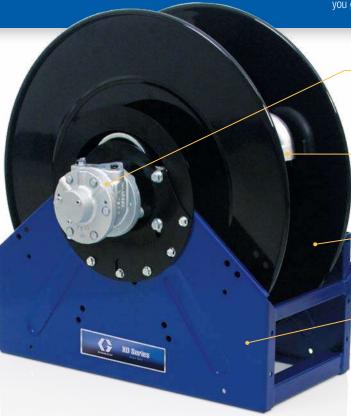


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#### Safe, Versatile Powered Hose Reels

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<br>Pressure Level | <80 dB(A)   |
| Pneumatic Motors Sound Pressure Level                 | 84.6 dB(A)  |
| Pneumatic Motors Sound Power Level                    | 89.9 dB(A)  |
| Instruction Manual                                    | 332630  |









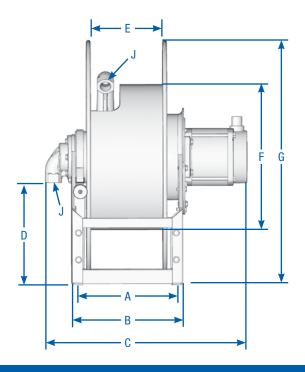








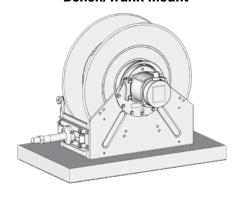




#### **Dimensions** Reference dimension "D" for specific motor type Dimensions in (mm) Inlet/Outlet Α С Model Size (J) (Mounting В D Ε F G NPT(F) Hydraulic Pneumatic Electric Holes) XD6010 1 in/1 in 10.45 (256) 11.8 (300) 20.4 (519) 15.7 (400) 21.6 (547) 10.9 (277) 7.8 (198) 15.5 (394) 26.1 (663) XD7010 1 in/1 in 12.95 (329) 22.9 (583) 18.2 (463) 14.3 (363) 24.1 (611) 10.9 (277) 10 (254) 10 (254) 26.1 (663) 1-1/2 in/ XD7015 12.95 (329) 14.3 (363) 10.9 (277) 23.7 (603) 19 (483) 24.8 (631) 10 (254) 10 (254) 26.1 (663) 1-1/2 in XD7020 10.2 (259) 2 in/2 in 12.95 (329) 14.3 (363) 24.1 (613) 19.4 (493) 25.2 (641) 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) 1-1/2 in/ XD8015 20.68 (525) 26.7 (679) 32.5 (827) 13.4 (340) 22.1 (561) 31.4 (799) 18 (457) 15.5 (394) 30.1 (765) 1-1/2 in 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.







#### Specify the Hose Fluid Type and Capacity

Determine your fluid type and capacity before selecting your reel.

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

#### **Select Your Drive Type and Frame**

Reels can be ordered with a motor or without. If you choose a model without a motor, you must purchase the motor separately.

- ☐ Order Reel with Motor Included (Pages 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

REQUIRED



**Choose Your Reel Size** 

□ XD 60 □ XD 70 □ XD 80



**Choose Your Reel Color** 

Select from Blue, Yellow or White.

☐ Blue ☐ Yellow ■ White



#### Choose Your Controls (Pages 254)

- □ Pneumatic Motor
  - ☐ Pneumatic 2-position, 3-way valve
- ☐ Hydraulic Motor
  - ☐ 12 VDC electric control of hydraulic motor, 3-position,
  - □ 12 VDC electric control of hydraulic motor with switch, 3-position, 4-way valve
  - ☐ 24 VDC electric control of hydraulic motor, 3-position, 4-way valve
  - ☐ 24 VDC electric control of hydraulic motor with switch, 3-position, 4-way valve
- □ Electric Motor
  - ☐ Hazardous location on/off button
  - □ 12 VDC intermittent-duty solenoid
  - □ 24 VDC intermittent-duty solenoid
  - ☐ Manual reset button circuit breaker (25 or 50 amp)





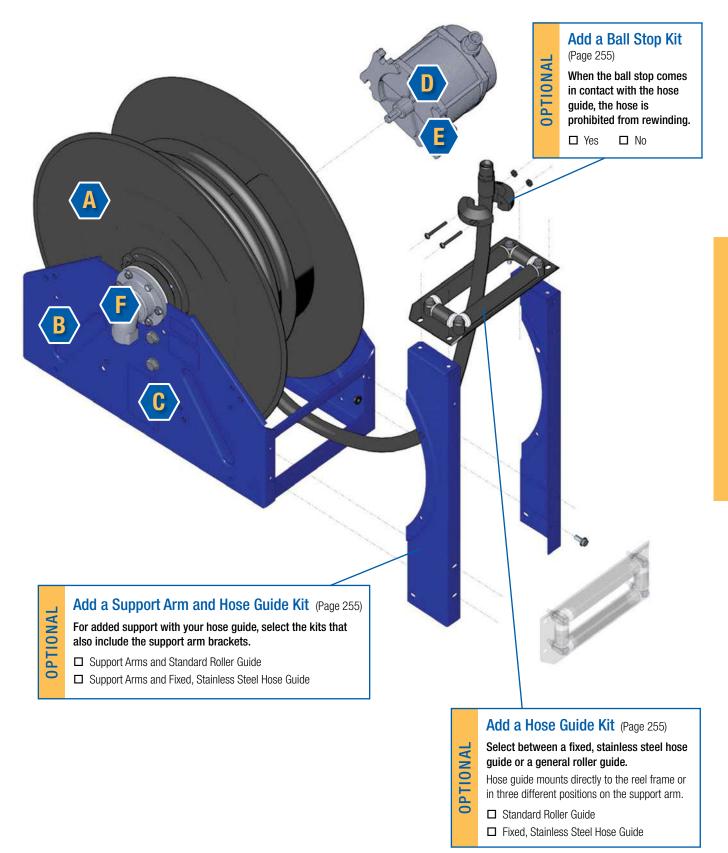
## Hose Inlet Kit (Page 255) FOR INSTALLATION

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

Note: All 1-1/2 in (38 mm) hose reels include a 2 in (51 mm) Victaulic-style groove on inlet. If you are using these reels, it is recommended to order an inlet kit from Graco.

- ☐ Yes (required for installation)
- ☐ No (will supply my own hose inlet kit)





#### **XD Series Bare Hose Reels**













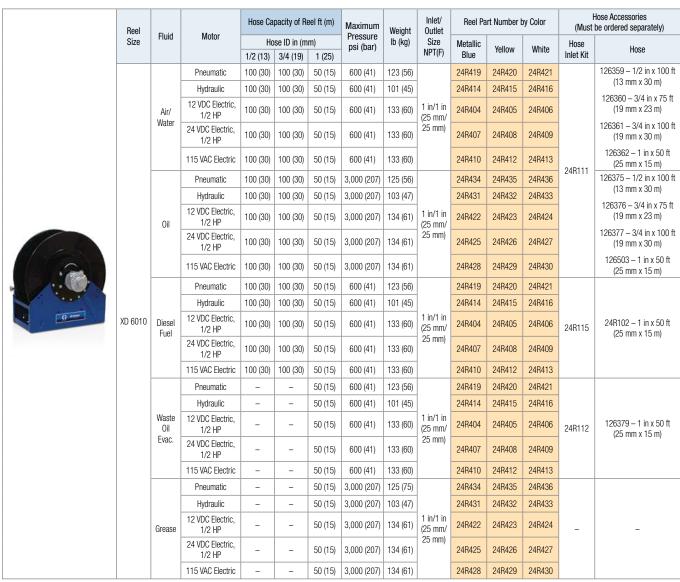


60 / 70 / 80



#### Ordering Information

#### Reel with Motor - 1 in (25 mm) Inlet/Outlet XD 60 Reels



























60 / 70 / 80



### Reel with Motor - 1 in (25 mm) Inlet/Outlet XD 70 / XD 80 Reels

|   | Reel    | Fluid          | Motor                   | Hose Capacity of Reel ft (m)  Hose ID 1 in (25 mm)  Maximum Pressure psi (bar) |             | Weight         | Inlet/<br>Outlet               | Reel Part Number by Color |        |                   | Hose Accessories<br>(Must be ordered separately) |   |
|---|---------|----------------|-------------------------|--|-------------|----------------|--------------------------------|---------------------------|--------|-------------------|--|---|
| S | Size    |                |                         |  | lb (kg)     | Size<br>NPT(F) | Metallic<br>Blue               | Yellow                    | White  | Hose<br>Inlet Kit | Hose   |   |
|   |         |                | Pneumatic               | 100 (30)   | 600 (41)    | 122 (55)       | 1 in/1 in<br>(25 mm/<br>25 mm) | 24R449                    | 24R450 | 24R451            | OADMA  | 126363 – 1 in x 75 ft<br>(25 mm x 23 m)<br>126364 – 1 in x 100 ft<br>(25 mm x 30 m) |
|   |         | Air/<br>Water  | Hydraulic               | 100 (30)   | 600 (41)    | 100 (45)       |                                | 24R446                    | 24R447 | 24R448            |  |   |
|   |         |                | 12 VDC Electric, 1/2 HP | 100 (30)   | 600 (41)    | 132 (60)       |                                | 24R437                    | 24R438 | 24R439            |  |   |
|   |         |                | 24 VDC Electric, 1/2 HP | 100 (30)   | 600 (41)    | 132 (60)       |                                | 24R440                    | 24R441 | 24R442            |  |   |
|   |         |                | 115 VAC Electric        | 100 (30)   | 600 (41)    | 132 (60)       |                                | 24R443                    | 24R444 | 24R445            |  |   |
|   |         | Oil            | Pneumatic               | 100 (30)   | 3,000 (207) | 100 (56)       | 1 in/1 in<br>(25 mm/<br>25 mm) | 24R464                    | 24R465 | 24R466            | 24R111   | 126504 – 1 in x 75 ft<br>(25 mm x 23 m)<br>126505 – 1 in x 100 ft<br>(25 mm x 30 m) |
|   |         |                | Hydraulic               | 100 (30)   | 3,000 (207) | 102 (46)       |                                | 24R461                    | 24R462 | 24R463            |  |   |
| X | XD 7010 |                | 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<br>Fuel | Pneumatic               | 100 (30)   | 600 (41)    | 122 (55)       | 1 in/1 in<br>(25 mm/<br>25 mm) | 24R449                    | 24R450 | 24R451            | 24R115   | 24R103 – 1 in x 75 ft<br>(25 mm x 23 m)<br>24R106 – 1 in x 100 ft<br>(25 mm x 30 m) |
|   |         |                | Hydraulic               | 100 (30)   | 600 (41)    | 100 (45)       |                                | 24R446                    | 24R447 | 24R448            |  |   |
|   |         |                | 12 VDC Electric, 1/2 HP | 100 (30)   | 600 (41)    | 132 (60)       |                                | 24R437                    | 24R438 | 24R439            |  |   |
|   |         |                | 24 VDC Electric, 1/2 HP | 100 (30)   | 600 (41)    | 132 (60)       |                                | 24R440                    | 24R441 | 24R442            |  |   |
|   |         |                | 115 VAC Electric        | 100 (30)   | 600 (41)    | 132 (60)       |                                | 24R443                    | 24R444 | 24R445            |  |   |
|   |         |                | Pneumatic               | 150 (46)   | 600 (41)    | 164 (74)       |                                | 24R531                    | 24R532 | 24R533            |  | -   |
|   |         | Air/<br>Water  | Hydraulic               | 150 (46)   | 600 (41)    | 142 (64)       | 1 in/1 in<br>(25 mm/<br>25 mm) | 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            |  |   |
|   | D       |                | Pneumatic               | 150 (46)   | 3,000 (207) | 165 (75)       | 1 in/1 in<br>(25 mm/<br>25 mm) | 24R546                    | 24R547 | 24R548            | 24R111   | -   |
|   |         | Oil            | Hydraulic               | 150 (46)   | 3,000 (207) | 143 (65)       |                                | 24R543                    | 24R544 | 24R545            |  |   |
| X |         |                | 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<br>Fuel | Pneumatic               | 150 (46)   | 600 (41)    | 164 (74)       | 1 in/1 in<br>(25 mm/<br>25 mm) | 24R531                    | 24R532 | 24R533            | 24R115   | 24T252 – 1 in x 150 ft<br>(25 mm x 46 m)  |
|   |         |                | Hydraulic               | 150 (46)   | 600 (41)    | 142 (64)       |                                | 24R528                    | 24R529 | 24R530            |  |   |
|   |         |                | 12 VAC Electric, 1/2 HP | 150 (46)   | 600 (41)    | 173 (78)       |                                | 24R519                    | 24R520 | 24R521            |  |   |
|   |         | 1 001          | 24 VAC 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            |  |   |



#### **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<br>Size | Fluid                 | Motor                   | Hose Capacity<br>of Reel ft (m) | Maximum<br>Pressure | Weight<br>Ib (kg) | Inlet/<br>Outlet<br>Size<br>NPT(F) | Reel Part Number by Color |        |               | Hose Accessories<br>(Must be ordered separately) |  |
|--|--------------|-----------------------|-------------------------|---------------------------------|---------------------|-------------------|------------------------------------|---------------------------|--------|---------------|--|--|
|  |              |                       |                         | Hose ID<br>1-1/2 in (38 mm)     | psi (bar)           |                   |                                    | Metallic<br>Blue          | Yellow | White         | Hose<br>Inlet Kit                                | Hose   |
|  | XD 7015      |                       | Pneumatic               | 65 (20)                         | 600 (41)            | 100 (56)          |                                    | 24R516 24R                | 24R517 | 24R518        | 24R117<br>28<br>11                               | 24R110 – 1-1/4 in x 50 ft<br>(32 mm x 15 m)<br>24R114 – 1-1/2 in x 50 ft                   |
|  |              | Diesel<br>Fuel        | Hydraulic               | 65 (20)                         | 600 (41)            | 102 (46)          | 24R500<br>24R500                   | 24R512                    | 24R513 | 24R515        |  |  |
|  |              |                       | 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        |  | (38 mm x 15 m)   |
|  |              |                       | 115 VAC Electric        | 65 (20)                         | 600 (41)            | 133 (60)          |                                    | 24R509                    | 24R510 | 24R511        |  |  |
|  |              | Waste<br>Oil<br>Evac. | Pneumatic               | 50 (15)                         | 600 (41)            | 100 (56)          |                                    | 24R516                    | 24R517 | 24R518        |  | 126380 – 1-1/4 in x 35 ft  |
|  |              |                       | Hydraulic               | 50 (15)                         | 600 (41)            | 102 (46)          | 1-1/2 in/                          | 24R512                    | 24R513 | 24R515        |  | (32 mm x 11 m)<br>126688 – 1-1/4 in x 50 ft<br>(32 mm x 15 m)<br>127173 – 1-1/2 in x 50 ft |
|  |              |                       | 12 VDC Electric, 1/2 HP | 50 (15)                         | 600 (41)            | 133 (60)          | 1-1/2 in<br>(38 mm/                | 24R503                    | 24R504 |               | _  |  |
|  |              |                       | 24 VDC Electric, 1/2 HP | 50 (15)                         | 600 (41)            | 133 (60)          | 38 mm)                             | 24R506                    | 24R507 |               |  |  |
|  |              |                       | 115 VAC Electric        | 50 (15)                         | 600 (41)            | 133 (60)          | 24R50                              | 24R509                    | 24R510 | 24R511        |  | (38 mm x 15 m)   |
|  | XD 8015      | Diesel<br>Fuel        | Pneumatic               | 100 (50)                        | 600 (41)            | 165 (75)          | 24R561<br>24R558                   | 24R561                    | 24R562 | 24R563        |  |  |
|  |              |                       | Hydraulic               | 100 (50)                        | 600 (41)            | 143 (65)          |                                    | 24R559                    | 24R560 |               |  |  |
|  |              |                       | 12 VDC Electric, 1/2 HP | 100 (50)                        | 600 (41)            | 175 (79)          |                                    | 24R549                    | 24R550 | 24R551        | 551 24R117                                       | 24T253 – 1-1/2 in x 100 ft<br>(38 mm x 30 m)   |
|  |              |                       | 24 VDC Electric, 1/2 HP | 100 (50)                        | 600 (41)            | 175 (79)          | 24                                 | 24R552                    | 24R553 | 24R554        |  |  |
|  |              |                       | 115 VAC Electric        | 100 (50)                        | 600 (41)            | 175 (79)          |                                    | 24R555                    | 24R556 | 24R556 24R557 |  |  |

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

|  | Reel<br>Size | Fluid          | Motor                   | OI DEEL IT (III)        | Maximum<br>Pressure | Weight<br>Ib (kg) | Inlet/<br>Outlet<br>Size<br>NPT(F) | Reel Part Number by Color |        |        | Hose Accessories<br>(Must be ordered separately) |   |
|--|--------------|----------------|-------------------------|-------------------------|---------------------|-------------------|------------------------------------|---------------------------|--------|--------|--|---|
|  |              |                |                         | Hose ID<br>2 in (51 mm) | psi (bar)           |                   |                                    | Metallic<br>Blue          | Yellow | White  | Hose<br>Inlet Kit                                | Hose                                    |
|  | XD 7020      | Diesel<br>Fuel | Pneumatic               | 33 (10)                 | 600 (41)            | 128 (58)          | 2 in/2 in<br>(51 mm/<br>51 mm)     | 24T023                    | 24T024 | 24T025 | - 24R118 -                                       | 127167 – 2 in x 33 ft<br>(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 |  |   |
|  | XD 8020      |                | Pneumatic               | 50 (15)                 | 600 (41)            | 169 (76)          |                                    | 24R576                    | 24R577 | 24R578 |  | 24T254 – 2 in x 50 ft<br>(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 |  |   |



























60 / 70 / 80



# **Reel Frames Only**

# XD 60 / XD 70 / XD 80 Reels

Motor is not included and must be purchased separately.

|  | Reel<br>Size | Fluid                     | Hose Capacity of Reel ft (m) |          |          | Maximum Pressure psi (bar)  Weight lb (kg) | Weight  | Inlet/<br>Outlet | Reel Part Number by Color |  |        |        |        |
|--|--------------|---------------------------|------------------------------|----------|----------|--|---------|------------------|---------------------------|--|--------|--------|--------|
|  |              |                           | Hose ID in (mm)              |          |          |  | Size    | Metallic         | Yellow                    | White                                  |        |        |        |
|  |              |                           | 1/2 (13)                     | 3/4 (19) | 1 (25)   | 1-1/2 (38)                                 | 2 (51)  | por (bur)        |                           | NPT(F)                                 | Blue   | IGHOW  | WILLIG |
|  |              | Air/Water/<br>Diesel Fuel | 100 (30)                     | 100 (30) | 50 (15)  | -  | -       | 600 (41)         | 87 (39)                   | 1 in/1 in (25 mm/25 mm)                | 24T104 | 24T105 | 24T106 |
|  | XD 6010      | Oil                       | 100 (30)                     | 100 (30) | 50 (15)  | -  | -       | 3,000 (207)      | 88 (40)                   |  | 24T107 | 24T108 | 24T109 |
|  |              | Waste Oil Evac.           | _                            | _        | 50 (15)  | _  | -       | 600 (41)         | 87 (39)                   |  | 24T104 | 24T105 | 24T106 |
|  |              | Grease                    | -                            | _        | 50 (15)  | -  | -       | 600 (41)         | 87 (39)                   |  | 24T104 | 24T105 | 24T106 |
|  | XD 7010      | Air/Water/<br>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/<br>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/<br>1-1/2 in<br>(38 mm/38 mm) | 24T116 | 24T117 | 24T118 |
|  | VD 1012      |                           | -                            | -        | -        | 65 (20)                                    | -       | 600 (41)         | 87 (39)                   |  | 24T116 | 24T117 | 24T118 |
|  | XD 8015      | Diesel Fuel               | -                            | _        | -        | 100 (30)                                   | -       | 600 (41)         | 129 (58)                  |  | 24T128 | 24T129 | 24T130 |
|  | XD 7020      | DIESEI FUEI               | -                            | -        | -        | -  | 33 (10) | 600 (41)         | 91 (41)                   | 2 in/2 in<br>(51 mm/51 mm)             | 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.   |
| 3 | 24T911      | 24 VDC, 2/3 HP motor assembly, reversible type. For installing motor to bare XD frame.   |
|   | 24T889      | 115 VAC, 0.40 HP motor assembly, reversible type. For installing motor to bare XD frame. |

# **Remember to Order!**



# **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.               |
| 0          | 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. |
| N. Company | 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  |
| The same   | 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  |
| (0)        | 127222      | Manual-reset push-button circuit breaker, 25 amp rating  |





















# **Ball Stop Kits**

| Part Number | Description                                 |
|-------------|---|
| 237873      | Ball stop kit used for 3/4 in (19 mm) hose  |
| 237874      | Ball stop kit used for 1 in (25 mm) hose    |
| 24R060      | Ball stop kit used for 1.25 in (32 mm) hose |
| 24R061      | Ball stop kit used for 1.5 in (38 mm) hose  |

# **Hose Guide**

|   | Part Number | Description                                       |
|---|-------------|---|
| 1 | 24T327      | Stainless steel hose guide for XD 60              |
|   | 24T328      | Stainless steel hose guide for XD 70              |
|   | 24T329      | Stainless steel hose guide for XD 80              |
|   | 24R072      | Roller guide kit with bracket for XD 40 and XD 60 |
|   | 24T330      | Roller guide kit with bracket for XD 70           |
|   | 24T331      | Roller guide kit with bracket for XD 80           |

# **Support Arm Kit with Hose Guide**

|     | Part Number | Description  |
|-----|-------------|--|
|     | 24T332      | Arm kit with stainless steel hose guide for XD 60 (24T327) |
| 1 / | 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<br>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<br>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<br>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<br>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<br>150 psi (10 bar), 1-1/2 in NPT hose inlet ID, 28 in (710 mm) long |

# **Self-Adhesive Identification Label Set**

| C ANTHORES C MUNICIPAL C   | Part Number | Description  |
|--|-------------|--|
| © SAC 1-30 © EXPROVE © SAC 1-30 © CHARBUS © SAC 1-30 © CHARBUS © SAC 1-30 © CHARBUS © SAC 2-30 © OKAR © SAC 2-30 © AIR | 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 |



# **XD Series Hose Reel Accessories**

















# >>> Ordering Information

# **Hose Identification Wraps**

Vinyl hose wrap for easy identification of meter fluid

|          | Part Number | Description |
|----------|-------------|-------------|
| () GRACO | 17S659      | Red         |
| () GRACO | 17\$660     | Blue        |
| 0 GRACO  | 17S661      | Green       |
| () GRACO | 17S662      | Yellow      |
| O GRACO  | 17S663      | White       |

# **Air Hoses**



|   | Part Number | Description   |
|---|-------------|---|
|   | 126359      | 1/2 in x 100 ft (13 mm x 30 m) hose for air/water, 300 psi (20.6 bar) |
|   | 126360      | 3/4 in x 75 ft (19 mm x 23 m) hose for air/water, 300 psi (20.6 bar)  |
| 1 | 126361      | 3/4 in x 100 ft (19 mm x 30 m) hose for air/water, 300 psi (20.6 bar) |
|   | 126362      | 1 in x 50 ft (25 mm x 15 m) hose for air/water, 300 psi (20.6 bar)    |
|   | 126363      | 1 in x 75 ft (25 mm x 23 m) hose for air/water, 300 psi (20.6 bar)    |
|   | 126364      | 1 in x 100 ft (25 mm x 30 m) hose for air/water, 300 psi (20.6 bar)   |

# **Oil Hoses**



| Part Number | Description  |
|-------------|--|
| 126375      | 1/2 in x 100 ft (13 mm x 30 m) hose for oil, 2,000 psi (138 bar) |
| 126376      | 3/4 in x 75 ft (19 mm x 23 m) hose for oil, 1,500 psi (103 bar)  |
| 126377      | 3/4 in x 100 ft (19 mm x 30 m) hose for oil, 1,500 psi (103 bar) |
| 126503      | 1 in x 50 ft (25 mm x 15 m) hose for oil, 1,275 psi (88 bar)     |
| 126504      | 1 in x 75 ft (25 mm x 23 m) hose for oil, 1,275 psi (88 bar)     |
| 126505      | 1 in x 100 ft (25 mm x 30 m) hose for oil, 1,275 psi (88 bar)    |
|             | 126375<br>126376<br>126377<br>126503<br>126504                   |

# **Waste Oil Evacuation Hoses**



| Part Number | Description  |
|-------------|--|
| 126379      | 1 in x 50 ft (25 mm x 15 m) hose for waste oil, 250 psi (17 bar)         |
| 126380      | 1-1/4 in x 35 ft (32 mm x 10.5 m) hose for waste oil, 200 psi (13.8 bar) |
| 126688      | 1-1/4 in x 50 ft (32 mm x 15 m) hose for waste oil, 200 psi ( 13.8 bar)  |
| 127173      | 1-1/2 in x 50 ft (38 mm x 15 m) hose for waste oil, 200 psi (13.8 bar)   |

### **Diesel Fuel Hoses**



| Part Number | Description  |
|-------------|--|
| 24R102      | 1 in x 50 ft (25 mm x 15 m) hose for diesel fuel, 250 psi (17 bar)       |
| 24R103      | 1 in x 75 ft (25 mm x 23 m) hose for diesel fuel, 250 psi (17 bar)       |
| 24R106      | 1 in x 100 ft (25 mm x 30 m) hose for diesel fuel, 250 psi (17 bar)      |
| 24T252      | 1 in x 150 ft (25 mm x 46 m) hose for diesel fuel, 250 psi (17 bar)      |
| 24R108      | 1-1/4 in x 35 ft (32 mm x 10.5 m) hose for diesel fuel, 250 psi (17 bar) |
| 24R110      | 1-1/4 in x 50 ft (32 mm x 15 m) hose for diesel fuel, 250 psi (17 bar)   |
| 24R114      | 1-1/2 in x 50 ft (38 mm x 15 m) hose for diesel fuel, 150 psi (11 bar)   |
| 24T253      | 1-1/2 in x 100 ft (38 mm x 30 m) hose for diesel fuel, 150 psi (11 bar)  |
| 127167      | 2 in x 33 ft (51 mm x 10 m) hose for diesel fuel, 150 psi (11 bar)       |
| 24T254      | 2 in x 50 ft (51 mm x 15 m) hose for diesel fuel, 150 psi (11 bar)       |
|             |  |









# **Convenient Used-Oil Receiver**

Oil King is designed with the busy shop in mind. With oversized tires and push-pull handles it allows for smooth maneuvering. The large funnel can collect fluids from both a drain plug and a filter port at the same time.



# Large Offset Collection Pan

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

# Filter Drain Tray

Used filters are able to drain separately from the collection pan.

# **Convenient Tool Tray**

Built-in holding bins for new or used filters, wrenches and rags all at your fingertips.

# Liquid Sight Gauge

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

# Large 25-Gallon (94.6 I) Capacity Receiver

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

### **Oversized Tires**

Easily maneuver over hose and rough floors.

# Two Evacuation Port Options

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

### **Typical Applications**

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

### Typical Fluids Handled

Used oil

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

# Ordering Information

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

Must ship via truck.







# **5 Year**Warrantu

# **Durable Receiver**

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

# Large Offset Collection Pan

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

# **Convenient Tool Tray**

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

# Liquid Sight Gauge

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

# Large 25-Gallon (94.6 I) Capacity Receiver

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

### Oversized Tires

Easily maneuver over hose and rough floors.

### Two Evacuation Port Options

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

### **Typical Applications**

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

### Typical Fluids Handled

Used anti-freeze

| echnical 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.





G Oil A

# **Pressurized Oil Drain**

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



# Large Offset Collection Pan

23 inch (58 cm) diameter offset collection bowl gives you a 31 inch (79 cm) total reach.

# Superior Maneuverability

Wider and thicker handle for comfort.

# Easy to Drain

Pressurize using shop air for easy oil evacuation.

# Large 24-Gallon (90 I) Capacity Receiver

Perfect for small to large shops without an evacuation system.

# Liquid Sight Gauge

Easy-to-read tank-level gauge lets you know when the tank is full.

# Large Casters

Easily move around rough shop floors.

### **Typical Applications**

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

### Typical Fluids Handled

Used oil

| echnical Specifications |                    |                               |
|-------------------------|--------------------|-------------------------------|
|                         | Fluid              | Used oil                      |
|                         | Fluid Capacity     | 24 gal (91 l)                 |
|                         | Evacuation         | Pressurized                   |
|                         | Receiver Material  | Steel                         |
|                         | Length             | 24 in (60 cm)                 |
|                         | Width              | 16 in (40.6 cm)               |
|                         | Height             | 56 to 80 in (143.5 to 203 cm) |
|                         | Funnel Size        | 24 in (61 cm) diameter        |
|                         | Dry Weight         | 74 lb                         |
|                         | Instruction Manual | 310864                        |

# >>> Ordering Information

| Part Number | Description                                    |
|-------------|--|
| 119577      | 24 gal (90 l) steel-tank pressurized oil drain |





# Vacuum-Assisted Oil Collection System

Large-capacity collection systems make removing drain plugs a thing of the past. Oil Ace models with optional sight chamber offer the technician a visual indication of the waste fluid quantity. This technology reduces the threat of costly damages caused by over- or under-torquing or cross-threading drain plugs.

# Large Offset Collection Pan

Wide offset collection bowl prevents splashing.

# Vacuum Gauge

Ensure peak performance with easy-to-read vacuum gauge.

# Sight Glass

Inspect oil quality via large, clear evacuation chamber and verify amount extracted.



# Easy to Drain

Pressurize using shop air for easy oil evacuation.

### Vacuum Probes

Variety of flexible suction attachments and adapters included.

# Large 24 Gallon (90 I) Capacity Receiver

Perfect for small to large shops without an evacuation system.

### **Typical Applications**

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

### Typical Fluids Handled

Used oil

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





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





# **Typical Applications**

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

# Typical Fluids Handled

• Used oil

| Technical Specifications |                   |                                      |
|--------------------------|-------------------|--------------------------------------|
| I                        | Fluid             | Used oil                             |
| Ī                        | Fluid Capacity    | 16 gal (61 l)                        |
| I                        | Evacuation        | Gravity                              |
| Ī                        | Receiver Material | Steel (239302 does not include drum) |
| Ī                        | Manual            | 306449                               |
| I                        | Length            | 26 in (66 cm)                        |
| 1                        | Width             | 23 in (58 cm)                        |
| I                        | Height            | 42 to 70 in (107 to 177 cm)          |
| Ī                        | Funnel Size       | 23 x 23 in (58 x 58 cm)              |
| _                        | Dry Weight        | 40 lb (18 kg)                        |

# Ordering Information

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

 $<sup>^*</sup>$ Use with evacuation kit 224873 or 24E166. 240832 can be ordered separately for existing diaphragm pump evacuation systems.

# **Accessories**

# **Funnel Kit**

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

# **Wall-Mounted Funnel Drain**

| Part Number | Description   |
|-------------|---|
| 154616      | Use with Pedestal Receiver 225272 to open automatic check-valve and drain used oil through wall to waste tank. Drain has 1-1/4 NPT(F) outlet. |

# **Drum-Mounted Funnel Drain**

| Part Number | Description   |
|-------------|---|
| 156789      | Use with Pedestal Receiver 225272 to open automatic check-valve and drain used oil into standard drum. Funnel drain has 2 in NPT bung fitting for use with 55 gal (210 l) or 16 gal (60 l) drums or 275 gallon (1,100 l) tanks. |

# **ATF Drain Funnel**

| Part Number | Description  |
|-------------|--|
| 208009      | Use with Pedestal Receiver 225272 to extend funnel reach. Use for draining transmissions. Not equipped with drain plug. 16 in x 24-1/2 in. |







# **Typical Applications**

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

# Typical Fluids Handled

Used oil

| echnical 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**





# Typical Applications

- Fast lube centers
- Fleet services facilities

# Typical Fluids Handled

• Used oil

| Technical Specifications |                    |                                |                                  |  |
|--------------------------|--------------------|--------------------------------|----------------------------------|--|
|                          | Part Number        | 218969                         | 235346                           |  |
|                          | Fluid              | Oil                            | Oil                              |  |
|                          | Fluid Capacity     | 30 gal (113 l)                 | 27 gal (102 l)                   |  |
|                          | Evacuation         | Gravity                        | Gravity                          |  |
|                          | Receiver Material  | Steel                          | Steel                            |  |
|                          | Extension Range    | 37.5 to 46 in (0.95 to 1.17 m) | 34.1 to 42.6 in (0.87 to 1.08 m) |  |
|                          | Instruction Manual | 307727                         | 307727                           |  |

# 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





# 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,<br>stainless steel, PTFE,<br>zinc-plated steel | Aluminum, TPC-ET, acetal,<br>PTFE, Buna-N |
| Sound Pressure Level                 | 85 dB(A)   | 96 dB(A)                                  |
| Sound Power Level                    | 95 dB(A)   | 90 dB(A)                                  |
| Approximate Weight                   | 8.5 lb (3.9 kg)  | 23 lb (10.5 kg)                           |
| Instruction Manual                   | 308573   | 313597                                    |

# >>> Ordering Information

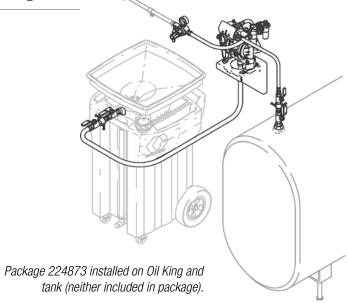
| Part Number | Description                |
|-------------|----------------------------|
| 241906      | Husky 716 Evacuation Pump  |
| 647731      | Husky 1050 Evacuation Pump |



# **Wall Mount Packages**



| Package Number         | 24E166                 | 224873       |  |
|------------------------|------------------------|--------------|--|
| Diaphragm Pump         | 1050A (1 in) UL-listed | 716 (3/4 in) |  |
| Pump Part Number       | 647731                 | 241906       |  |
| Mounting Type          | Wall Bracket           | Wall Bracket |  |
| Mounting Part Number   | 24C637                 | 224835       |  |
| Fluid                  | Oil                    | Oil          |  |
| Evacuation             | Drum Adapter           | Drum Adapter |  |
| Evacuation Part Number | 240832                 | 240832       |  |
| Air Installation Kit   | 240684                 | 240684       |  |
| Fluid Installation Kit | 240685                 | 240685       |  |
| Instruction Manual     | 313597                 | 308719       |  |
| Listings               | UL, CE                 | _            |  |





# **Base Pump Packages**

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



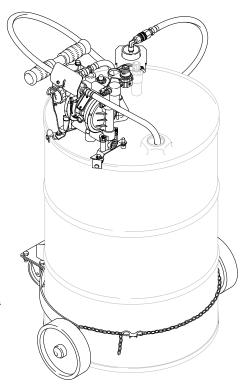




# **Fas-Vac Mobile Packages**



| Package Number                            | 224700          | 224701          |
|---|-----------------|-----------------|
| Cart                                      | 224665          | 111470          |
| Compatible Drum Size<br>(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) |                 | Included)       |
| Filter Regulator<br>Lubricator (FRL)      | 110149          | 110149          |
| FRL Mounting Kit                          | 224759          | 224759          |



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

# **4-Way Evacuation Valve**

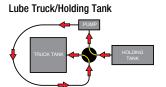
Directional control valve used to simplify the filling and emptying of tanks



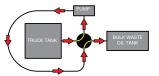
### **Features and Benefits**

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

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



Lube Truck/Bulk Waste Tank



# **Air Regulators**

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

|             | Part Number | Description                         |
|-------------|-------------|-------------------------------------|
|             | 110318      | 1/4 NPT(FBE)                        |
|             | 110147      | 1/4 NPT(FBE) with gauge             |
|             | 110234      | 3/8 NPT(FBE)                        |
| The same of | 109075      | 3/8 NPT(FBE) with gauge             |
| See .       | 202858      | 3/8 NPT(M) x 1/2 NPSM(F) with gauge |
| Steep Steep | 104266      | 1/2 NPT(FBE)                        |
|             | 244844      | 1/2 NPT(FBE) with gauge             |
| 1           | 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.   |
| T | 106148      | 3/8 NPT(FBE) Air Filter. Auto-drain.   |
| Ŧ | 106149      | 1/2 NPT(FBE) Air Filter. Manual drain.   |
| Ť | 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 |
| and the same of th | 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.  |
| 6650 | 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.  |
| 200  | 221007      | Swing-Arm Drain Kit, used for servicing single rolling used-oil receiver (218969). When used with tandem drain kit (218970) it can service two receivers on a single track. Kit includes swivel elbow (108867), connector hose, dust cap (108203) and male adapter (108202). |
| 1530 | 116229      | Oil Tank Monitor. Shuts off air to the pump when tank is full.   |
| Q.   | 223888      | 6 ft (1.8 m) suction hose for ATF and 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   |



| Notes |      |  |
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SORIES

AIR ACCESSO

1042**66 300** PSI 21 MAX WPR





### **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 |
|--------------|----------------------------|--------|--------|--------|--------|
| <b>5 9 6</b> | NPT(FBE)                   | 110223 | 110224 | 110225 | 110226 |
|              | NPT(MXF)<br>inlet x outlet | -      | -      | 107142 | 107141 |

# **Ball Valve-Type Air Shut-Off Valve – Non-Pressure Relieving**

|  | Part Number | Inlet                            | Maximum<br>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<br>3/8 in NPT(F) | 500 psi                     |
|  | 109077      | 3/4 in NPT(FBE)                  | 600 psi                     |
|  | 118464      | 1 NPT(FBE)                       | 600 psi                     |



### **Air Needle Valve**

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

|   | Part Number | Inlet          | Outlet         |
|---|-------------|----------------|----------------|
| 3 | 205090      | 1/4 in NPSM(M) | 1/4 in NPSM(F) |
| H | 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.

| also . | Part Number | Maximum<br>Pressure Rating | Thread        |
|--------|-------------|----------------------------|---------------|
|        | 110065      | 60 psi (4 bar)             | 1/4 in NPT(M) |
| Ü      | 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  |
|---|-------------|---------------|--------|
| C | 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<br>Pressure Rating |
|------|-------------|-------------|---------------|---------------|----------------------------|
| 1000 | 158990      | 2           | 1/2 in NPT(F) | 3/8 in NPT(F) | 5,000 psi                  |

### **Runaway Valve**

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

| 7    | Part Number | Inlet           |
|------|-------------|-----------------|
| 4000 | 224040      | 3/4 in NPT(FBE) |





# **Blow Guns**

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

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

# **Tire Inflators**

|       | Part Number | Description                            |            | Inclu                  | ıdes              |               |
|-------|-------------|--|------------|------------------------|-------------------|---------------|
|       | Part Number | Description                            | 12 in Hose | Swivel Dual-Foot Chuck | Straight-On Chuck | Pop-Out Gauge |
|       | 236205      | Heavy-Duty<br>Tire-Inflator            | Yes        | Yes                    | -                 | Yes           |
| Light | 236206      | Passenger Car<br>Tire Inflator         | Yes        | -                      | Yes               | Yes           |
|       | 218545      | Tire Chuck with<br>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 |
|----|-------------|---------------|-----------------|
| 50 | 180685      | 1/4 in NPT(F) | 100 psi (7 bar) |











# **Heavy-Duty Reinforced Lubrication Hoses**

For use with grease, oil and undercoating material. Hoses are black, male connections at both ends. Lubrication hoses listed are grounded for static electrical discharge.

|  | ID Inch       | ID Inch Max PSI Hass Langth |                | Fitt                | Fitting       |             |
|--|---------------|-----------------------------|----------------|---------------------|---------------|-------------|
|  | (mm)          | (bar)                       | Hose Length    | End 1 Thread NPT(M) |               | Part Number |
|  |               |                             | 12 in (0.3 m)  | 1.6                 | 1.60          | 109145*     |
|  |               |                             | 15 in (0.4 m)  | 1/8                 | 1/8           | 109148*     |
|  |               |                             | 24 in ( 0.6 m) | 0.40                |               | 109146      |
|  |               |                             | 30 in (0.8 m)  | 3/8                 | 3/8           | 109147      |
|  |               |                             | 48 in (1.2 m)  |                     |               | 109149      |
|  |               |                             | 72 in (1.8 m)  |                     |               | 109150      |
|  | 1/4<br>(6.44) | 5,000<br>(345)              | 12 ft (3.6 m)  |                     | 1/4           | 109151      |
|  | (0.44)        | (040)                       | 15 ft (4.6 m)  |                     |               | 109152      |
|  |               |                             | 20 ft (6.1 m)  | 1/4                 | 3/8           | 109153      |
|  |               |                             | 25 ft (7.6 m)  |                     | 1/4           | 109154      |
|  |               |                             | 35 ft (10.6 m) |                     |               | 109156      |
|  |               |                             | 40 ft (12.2 m) |                     | 3/8           | 109157      |
|  |               |                             | 50 ft (15.3 m) |                     |               | 109158      |
|  |               |                             | 12 in (0.3 m)  | 1/4                 | 1/2           | 109160      |
|  |               |                             | 24 in (0.62 m) |                     | 3/8           | 109161      |
|  | 3/8<br>(9.5)  | 4,000<br>(276)              | 48 in (1.2 m)  | 3/8                 |               | 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) |                     | 3/0           | 109170      |
|  |               |                             | 15 in (0.4 m)  |                     | 1/2           | 110069      |
|  |               |                             | 18 in (0.5 m)  |                     |               | 220598      |
|  |               |                             | 54 in (1.4 m)  |                     |               | 220600      |
|  |               |                             | 72 in (1.8 m)  |                     |               | 220591      |
|  |               |                             | 10 ft (3.1 m)  |                     |               | 220590      |
|  | 1/2<br>(12.7) | 3,000<br>(207)              | 16 ft (4.9 m)  | 1/2                 | 1/2           | 220592      |
|  | (,            | (=51)                       | 20 ft (6.1 m)  |                     |               | 220593      |
|  |               |                             | 25 ft (7.6 m)  |                     |               | 220608      |
|  |               |                             | 40 ft (12.2 m) |                     |               | 221092      |
|  |               |                             | 50 ft (15.3 m) |                     |               | 221093      |
|  |               |                             | 75 ft (22.9 m) |                     | 3/4           | 237861      |
|  |               |                             | 18 in (0.4 m)  |                     | _,,           | 109108      |
|  |               |                             | 72 in (1.8 m)  | 3/4                 | 3/4<br>(19.1) | 109105      |
|  | 3/4<br>(19.1) | 2,250<br>(155)              | 10 ft (3.0 m)  |                     | (19.1)        | 111010      |
|  | (3.1.)        | (,                          | 75 ft (22.9 m) | 1/2                 | 1             | 237865      |
|  |               |                             | 50 ft (15.2 m) | 1/2                 | 1             | 237866      |
|  | 1 (25.4)      | 212 (14.6)                  | 50 ft (15.2 m) | 1                   | 1             | 241908      |
|  | 1 (25.4)      | 125 (8.7)                   | 50 ft (15.2 m) | 1                   | 1             | 249058      |



# **Air/Water Hoses**

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

| ID Inch           | Max PSI       | llogo l ongth  | Fit                 | ting                | Dort Number |
|-------------------|---------------|----------------|---------------------|---------------------|-------------|
| (mm)              | (bar)         | Hose Length    | End 1 Thread NPT(M) | End 2 Thread NPT(M) | Part Number |
|                   |               | 18 in (0.5 m)  |                     |                     | 109123      |
|                   |               | 4 ft (1.2 m)   |                     | 1/4                 | 109124      |
| Fabric-Reinforced |               | 6 ft (1.8 m)   | 1/4                 | 1/4                 | 109125      |
| 1/4               | 180<br>(12.4) | 10 ft (3.1 m)  | 1/4                 |                     | 109126      |
| (6.44)            | (12.1)        | 25 ft (7.6 m)  |                     | 1/0                 | 109127      |
|                   |               | 40 ft (12.2 m) |                     | 1/2                 | 109128      |
|                   |               | 40 ft (12.2 m) | 3/8                 | 1/4                 | 218491      |
|                   |               | 18 in (0.5 m)  |                     |                     | 204560      |
|                   |               | 4 ft (1.2 m)   | 3/8                 | 3/8                 | 109130      |
|                   |               | 6 ft (1.8 m)   | 3/8                 |                     | 203320      |
| 3/8               | 180           | 10 ft (3.1 m)  |                     |                     | 109131      |
| (9.5)             | (12.4)        | 16 ft (4.9 m)  | 1/4                 | 3/8                 | 110326      |
|                   |               | 25 ft (7.6 m)  | 3/8                 | 1/2                 | 109132      |
|                   |               | 40 ft (12.2 m) |                     |                     | 109134      |
|                   |               | 60 ft (18.3 m) |                     |                     | 109135      |
|                   |               | 22 in (0.56 m) |                     | 1/2                 | 218093      |
| 1/2               | 180           | 4 ft (1.2 m)   | 1/0                 |                     | 110046      |
| (12.7)            | (12.4)        | 6 ft (1.8 m)   | 1/2                 |                     | 205418      |
|                   |               | 10 ft (3.1 m)  |                     |                     | 214656      |
| 1/2               | 300           | 25 ft (7.6 m)  | 1/2                 | 1/0                 | 248312      |
| (12.7)            | (20.7)        | 50 ft (15.2 m) | 1/2                 | 1/2                 | 248313      |
|                   |               | 18 in (0.5 m)  |                     |                     | 110047      |
|                   |               | 4 ft (1.2 m)   |                     |                     | 110048      |
| 3/4<br>(19.1)     | 180<br>(12.4) | 6 ft (1.8 m)   | 3/4                 | 3/4                 | 208610      |
| (10.1)            | (12.1)        | 10 ft (3.1 m)  |                     |                     | 214955      |
|                   |               | 25 ft (7.6 m)  | 1                   |                     | 208611      |



# **Quick-Connect Coupler**

Permits quick, convenient attachment of air supply hoses.



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

# **Quick-Connect Nipple**

Allows quick attachment of air supply hoses to pump motor.



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













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



| Outlet     | Inlet      |            |            |            |            |          |
|------------|------------|------------|------------|------------|------------|----------|
| Outlet     | 1/8 in NPT | 1/4 in NPT | 3/8 in NPT | 1/2 in NPT | 3/4 in NPT | 1 in NPT |
| 1/8 in NPT | 150171     | 159840     | 156580     | -          | -          | -        |
| 1/4 in NPT | 100030     | -          | 150287     | 159842     | -          | -        |
| 3/8 in NPT | -          | 159841     | 150286     | 156022     | -          | -        |
| 1/2 in NPT | -          | 100206     | 100081     | -          | 168595     | -        |
| 3/4 in NPT | -          | 100615     | 100505     | 100896     | -          | -        |
| 1 in NPT   | _          | _          | _          | 100380     | 158586     | _        |

# **Street Elbows**



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

# **Coupling – Standard**



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

# **Hex Nipples - Standard and Reducing**



| Male End 2    | Male End 1 |            |            |            |          |  |  |  |  |  |  |
|---------------|------------|------------|------------|------------|----------|--|--|--|--|--|--|
| IVIAIC LIIU Z | 1/4 in NPT | 3/8 in NPT | 1/2 in NPT | 3/4 in NPT | 1 in NPT |  |  |  |  |  |  |
| 1/8 in NPT    | 151519     | 156296     | 159239     | _          | -        |  |  |  |  |  |  |
| 1/4 in NPT    | 156971     | 165198     | 162449     | -          | -        |  |  |  |  |  |  |
| 3/8 in NPT    | -          | 156849     | -          | 194048     | -        |  |  |  |  |  |  |
| 1/2 in NPT    | -          | -          | 158491     | 157191     | -        |  |  |  |  |  |  |
| 3/4 in NPT    | -          | -          | -          | 175013     | 158555   |  |  |  |  |  |  |



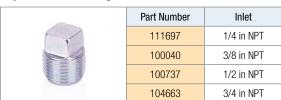








# **Square Head Plug**















|           |            |                                    | y'.                                |                               |                       |                               |
|-----------|------------|------------------------------------|------------------------------------|-------------------------------|-----------------------|-------------------------------|
| Rigid End | Swivel End | Straight Swivel<br>Adapter (m x f) | Straight Swivel<br>Adapter (f x f) | 90° Swivel<br>Adapter (f x f) | 90° Swivel<br>(m x f) | 45° Swivel<br>Adapter (m x f) |
| 1/8 in    | 1/4 in     | 208434                             | -                                  | -                             | -                     | -                             |
| 1/4 in    | 1/4 in     | 156823                             | 155570                             | 157676                        | 155541                | -                             |
| 1/4 111   | 3/8 in     | 157705                             | -                                  | -                             | -                     | -                             |
|           | 1/4 in     | -                                  | 159153                             | -                             | 155495                | -                             |
| 3/8 in    | 3/8 in     | 155665                             | 156173                             | 155677                        | 155494                | 161889                        |
|           | 1/2 in     | 162505                             | -                                  | 159801                        | 217430                | -                             |
|           | 1/4 in     | -                                  | 155653                             | -                             | -                     | -                             |
| 1/2 in    | 3/8 in     | 158256                             | 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                             | -                                  | -                             | -                     | -                             |
| 1 111     | 1 in       | 160022                             | 158383                             | -                             | -                     | -                             |

<sup>\*</sup>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                    | lalak      | Tube   | e OD   |
|-----|--------------------------------|------------|--------|--------|
|     | Description                    | Inlet      | 5/8 in | 7/8 in |
|     | Tube Union Flow<br>90° Elbow   | -          | 101012 | 101376 |
|     | Straight Tube<br>Union         | -          | 101009 | 101340 |
|     | Male Connector                 | 3/4 in NPT | -      | 101339 |
|     | Straight Female<br>Connector   | 1/2 in NPT | 101008 | -      |
| E i | Tube Tee with<br>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 Petroleum Management Group Equipment Extended Warranty

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

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

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

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

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

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

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

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

### FOR GRACO CANADA CUSTOMERS

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

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



# Graco Petroleum Management Group Equipment Extended Warranty (cont.)

|        |  | Warranty Period |
|--------|--|-----------------|
|        | Oil King, Coolant King, and Oil Ace  | 5 Years         |
|        | Pulse Fluid Management Hubs, TLMs, PACs and Extenders  | 2 Years         |
|        | Cord and Light Reels   | 2 Years         |
|        | Electrical Components  | 1 Year          |
|        | LD Series Hose Reels   | 5 Years         |
|        | Wear Parts, including but not limited to hose, seals, swivel seats and roller guides         | 1 Year          |
| REELS  | SD Series Hose Reels   | 7 Years         |
| ᇤ      | Power Springs  | 3 Years         |
|        | Wear Parts, including but not limited to hose, seals, swivel seats and roller guides         | 1 Year          |
|        | XD Series Hose Reels   | 7 Years         |
|        | Power Springs  | 3 Years         |
|        | Wear Parts, including but not limited to hose, seals, swivel seats, roller guides and motors | 1 Year          |
|        | Mechanical Meters  | 5 years         |
|        | Wear parts, including but not limited to o-rings, seals and valves                           | 1 Year          |
|        | LD Preset Meters   | 5 years         |
|        | Electronics  | 2 Years         |
| SS.    | Wear parts, including but not limited to o-rings, seals and valves                           | 1 Year          |
| METERS | SD Meters and Valves   | 7 Years         |
| 2      | Electronics  | 3 Years         |
|        | Wear parts, including but not limited to o-rings, seals and valves                           | 1 Year          |
|        | EM Meters and Valves / Pulse Meters and Valves   | 5 Years         |
|        | Electronics  | 3 Years         |
|        | Wear parts, including but not limited to o-rings, seals, valves and trigger locks            | 1 Year          |
|        | LD Oil/Grease Pumps  | 5 Years         |
|        | Wear Parts, including but not limited to o-rings, packings and seals                         | 1 Year          |
|        | Hoses with pump packages   | 1 Year          |
|        | AODD Pumps   | 5 Years         |
|        | Wear Parts, including but not limited to o-rings, packings and seals                         | 1 Year          |
|        | Hoses with pump packages   | 1 Year          |
| PUMPS  | Mini Fire-Ball 225 and Fire-Ball 300 Oil and Grease Pumps                                    | 7 Years         |
| P      | Wear Parts, including but not limited to o-rings, packings and seals                         | 1 Year          |
|        | Hoses with pump packages   | 1 Year          |
|        | Fire-Ball 425 Oil and Grease Pumps   | 10 Years        |
|        | Wear Parts, including but not limited to o-rings, packings and seals                         | 1 Year          |
|        | Hoses with pump packages   | 1 Year          |
|        | Fast-Ball and Fast-Flo Oil Pumps   | 5 Years         |
|        | LD Blue and SD Blue Diesel Exhaust Fluid Pumps   | 2 Years         |

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# **ABOUT GRACO**

Founded in 1926, Graco is a world leader in fluid handling systems and components. Graco products move, measure, control, dispense and apply a wide range of fluids and viscous materials used in vehicle lubrication, commercial and industrial settings.

The company's success is based on its unwavering commitment to technical excellence, world-class manufacturing and unparalleled customer service. Working closely with qualified distributors, Graco offers systems, products and technology that set the quality standard in a wide range of fluid handling solutions. Graco provides equipment for spray finishing, protective coating, paint circulation, lubrication, and dispensing sealants and adhesives, along with power application equipment for the contractor industry. Graco's ongoing investment in fluid management and control will continue to provide innovative solutions to a diverse global market.

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Graco is certified ISO 9001.

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