

# Dyna-Star™ HP and Dyna-Star HF

**Electric Lubrication Pumps** 



## The Graco Advantage

New innovations, like tube-in-tube vent and fill path, Advantage Drive<sup>™</sup>, and adjustable motor controls give you mobile lubrication capabilities like never before. Super-efficient design delivers the right amount of lubrication at the right time—all in a neat compact system.

### Versatile and Hassle Free

- 24 VDC electric lubrication pump
- Supplies grease to injector-based, series progressive and dual line metering systems
- High pressure (HP) model is capable of 344 bar (5,000 psi) with a maximum output of 295 cc (18 cubic inches) per minute
- High flow (HF) model is capable of 241 bar (3,400 psi) with a maximum output of 410 cc (25 cubic inches) per minute



Mobile Applications



### AC/DC Converter Box >

- Convenience of AC power while maintaining DC speed and amp control
- Eliminates expensive pneumatic or hydraulic power requirements



### Remote Fill Valve >

- Versatile placement enables ground-level filling up to 344 bar (5,000 psi)
- Ensures clean and efficient refills

## **Dyna-Star**™

### **Electric Pump**

### **New Innovative Design**

- Ability to adjust motor controls to perfectly match the pump to your application and environmental changes
- Maintains high performance levels even in cold weather to -40° C
- Easy, efficient seal replacement makes repairs quick to get you back to work fast

### **Top Quality Lubrication for:**

- Mining Operations
- Heavy-duty Construction
- Industrial Applications
- Milling and Crushing
- Well Services

Compact design saves deck space, has fewer moving parts for less repair, and no remote mounted components for easier installation. You get reliable service and minimal downtime for best-practice mobile lubrication.



## **Equipment That Works as Hard as You**

Power Input

Motor Speed Adjustment to match lube requirements to your environment

Current Control to fine-tune motor amperage

Signal Input from GLC Controller

Status Lights for easy troubleshooting



### Safely Move Pump

Built-in lift ring is rated to 226 kg (500 lbs)

### Graco Advantage Drive™

High quality helical hardened steel gears are lubricated for life and sealed to keep contaminants out for longer lasting performance. Field-proven for the last ten years to be the longest lasting drive in the industry.

#### Direct Mount Electric Vent Valve

Mounts directly to pump with no special brackets or hoses for a compact design and less parts to break or wear out. Deutsch connector is IP69K rated to keep out moisture. Built-in pressure relief for safety and compact, efficient installations.

#### Cavitation-free Fill and Vent Path

Provides simple and direct venting and filling to the foot of the pump. No cavitation due to improper filling and venting with no external vent hoses or extra internal pipes. Convert a standard drum to an injector pump station in minutes.

### Strong 12 Gauge Steel Reservoir

Available in 27 kg (60 lbs) or 41 kg (90 lbs) reservoirs with alternate fill and vent ports that deliver lube straight to the bottom of the pump. Common bolt pattern for easy drop-in replacement without drilling or adapter plates.



## Auto-Fill Shutoff

Innovative mechanical design that physically actuates a shut off of the fill pump for clean, trouble-free refilling. No electronics necessary, but proximity switch can be added for electronic signal for full reservoir.

### **Easy Lube Level Monitoring**

### Dip Stick >

For simple visual indication of lube level





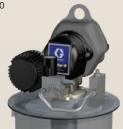
### Low Level >

Quick visual level indication with electronic signal to GLC 2200 or GLC 4400 controller



### Auto-Fill Shutoff >

Avoid over- or under-filling with this cost-effective mechanical solution. Visual indication of a full reservoir or connect to proximity switch for electronic indication.



## **Technical Information**



### Dyna-Star HP / HF

- HP Models: most commonly used for Injector based systems
   HF Models: most commonly used for Series Progressive systems

Maximum Lubricant Outlet Pressure					
HF Models	241 bar (24.1 MPa, 3500 psi)				
HP Models	344 bar (34.47 MPa, 5000 psi)				
Electrical Requirements					
All Models	24 VDC				
Input Voltage Range					
24 VDC	18 to 32 VDC				
Flow Rate Range					
HF Models	24.6 cm <sup>3</sup> - 410 cm <sup>3</sup> /minute (1.5 in <sup>3</sup> - 25 in <sup>3</sup> /minute)				
HP Models	24.6 cm <sup>3</sup> - 295 cm <sup>3</sup> /minute (1.5 in <sup>3</sup> - 18 in <sup>3</sup> /minute)				
Inlet/Outlet Sizes					
Tank/Reservoir Fill Port	1/2 in npt				
Overflow Port	1/2 in npt				
Fluid Outlet Size	3/8 in npt (f)				
Operating Temperature					
HF Models	-10° to 65° C (14° to 149° F)				
HP Models	-40° to 65° C (-40° to 149° F)				
Audible Sound Pressure					
71 dB(A)					
Manual	332514				

## **Ordering Information**

### **Stand Alone Pumps**

77X000	24 VDC HP Stand Alone Pump for 35 or 60 pound reservoir
77X001	24 VDC HP Stand Alone Pump Stand Alone Pump with Tube-in-Tube for 35 or 60 pound reservoir
77X002	24 VDC HP Stand Alone Pump Stand Alone Pump with Tube-in-Tube for 90 or 120 pound reservoir
77X003	24 VDC HP Stand Alone Pump Stand Alone Pump with Tube-in-Tube for 400 pound reservoir
77X014	24 VDC HF Stand Alone Pump for 35 or 60 pound reservoir
77X015	24 VDC HF Stand Alone Pump for 120 pound reservoir
77X016	24 VDC HF Stand Alone Pump for 400 pound reservoir

### **Custom Tank Injector Kits**

		COMPONENTS INCLUDED IN KIT							
KIT Part Number	KIT DESCRIPTION	24 VDC HP stand alone pump for 35 or 60 pound reservoir 77X001	24 VDC HP stand alone pump for 90 or 120 pound reservoir 77X002	24 VDC HP stand alone pump for 400 pound reservoir 77X003	24 VDC electric vent valve with Pressure relief 77X540				
77X011	24 VDC HP Pump and vent valve with Tube-in-Tube for 35 or 60 pound reservoir	•			•				
77X012	24 VDC HP Pump and vent valve with Tube-in-Tube for 90 or 120 pound reservoir		•		•				
77X013	24 VDC HP Pump and vent valve with Tube-in-Tube for 400 pound reservoir			•	•				

### **Standard Drum Injector Kits**

		COMPONENTS INCLUDED IN KIT						
KIT Part Number	KIT DESCRIPTION	Pump for 90/120 pound reservoir + vent valve 77X012	Pump for 400 pound reservoir + vent valve 77X013	Cover for 120 pound drum 77X514	Cover for 400 pound drum 77X515			
77X111	24 VDC HP Pump, Vent valve and cover with Tube-in-Tube for 120 pound reservoir	•		•				
77X112	24 VDC HP Pump, Vent valve and cover with Tube-in-Tube for 400 pound reservoir		•		•			

### **Standard Drum Kits**

		COMPONENTS INCLUDED IN KIT						
KIT Part Number	KIT DESCRIPTION	24 VDC HF stand alone pump for 120 pound reservoir 77X015	24 VDC HF stand alone pump for 400 pound reservoir 77X016	Cover for 120 pound drum 77X514	Cover for 400 pound drum 77X515			
77X121	24 VDC HF Pump and cover for 120 pound reservoir	•		•				
77X122	24 VDC HF Pump and cover for 400 pound reservoir		•		•			

## **Ordering Information**

### NEW EDS Injector Pump Kits fully assembled in Europe for improved customer flexibility!

Select the right Tank Injector kit and components to come up with your desired lubrication solution!

		COMPONENTS INCLUDED IN KIT								
KIT Part Number	KIT DESCRIPTION	Pump for 35/60 pound reservoir + vent valve 77X011	Pump for 90/120 pound reservoir + vent valve 77X012	Reservoir - 60 pound 77X535	Reservoir - 90 pound 77X536	Dip stick - 60 pound 77X531	Dip stick - 90 pound 77X530	Auto-fill shutoff 77X521	Follower plate 77X500	Low level kit 77X522
77X100	24VDC HP Injector module with pump, tube-in-tube, vent valve, tank and dip stick for 60 pound reservoir	•		•		•				
77X101	24VDC HP Injector module with pump, tube-in-tube, vent valve, tank and dip stick for 90 pound reservoir		•		•		•			
77X102	24VDC HP Injector module with pump, tube-in-tube, vent valve, tank and Auto-Fill Shutoff for 60 pound reservoir	•		•				•		
77X103	24VDC HP Injector module with pump, tube-in-tube, vent valve, tank and Auto-Fill Shutoff for 90 pound reservoir		•		•			•		
77X104	24VDC HP Injector module with pump, tube-in-tube, vent valve, follower plate, low level kit and tank for 60 pound reservoir	•		•					•	•
77X105	24VDC HP Injector module with pump, tube-in-tube, vent valve, follower plate, low level kit and tank for 90 pound reservoir		•		•				•	•

All EDS items mentioned on page 5 + 6 of this brochure can also be sold individually to provide for an even greater customer flexibility. Please see our Industrial Lubrication Buyer's guide (340821) for the complete EDS portfolio.



## **Ordering Information**

### **Accessories**

77X521		Auto-Fill Shutoff Kit
77X500		Follower Plate for Graco 60 pound and 90 pound Graco Tank for Tube-in-Tube
77X510		Follower Plate for 35 pound Bucket without Tube-in-Tube
247701		Follower Plate for 120 pound Drum without Tube-in-Tube
77X511		Follower Plate for 120 pound Drum with Tube-in-Tube
247702		Follower Plate for 400 pound Drum without Tube-in-Tube
77X512		Follower Plate for 400 pound Drum with for Tube-in-Tube
77X513		Conversion Kit, 60 pound to 35 pound
77X514		Cover for 120 pound Drum
77X515		Cover for 400 pound Drum
77X540		24 VDC Electric Vent Valve with Pressure Relief
77X522		Low Level Kit Sight Glass, Electric Low Level Switch and Cable (requires Follower Plate 77X500)
77X527	*	Power Cable for Series Progressive System (use with 77X528)
77X529	*	Power Cable for Injector System (use with 77X528)
77X528	*	Extension Power Cable for Both 77X527 and 77X529 - 15 feet (4.6 meters)
77X545	**	Power Cable for Series Progressive Systems
77X546	**	Power Cable for Injector based Systems
77X551	**	Retrofit Kit for Power Cable Conversion to M23 Connection

#### Pound/kg ~ 35/16 - 60/27 - 90/41 - 120/54 - 400/181

- $^\star$  For models purchased before 2016 with internal power connection  $^{\star\star}$  For models purchased after 2016 with external M23 power connection

### **Images**

































#### **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.

#### **GRACO LOCATIONS**

### MAILING ADDRESS P.O. Box 1441 Minneapolis, MN 55440-1441

Tel: 612-623-6000 Fax: 612-623-6777

#### **AMERICAS**

#### **MINNESOTA**

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

### **EUROPE**

#### **BELGIUM**

European Headquarters Graco BVBA Industrieterrein-Oude Bunders Slakweidestraat 31 3630 Maasmechelen, Belgium Tel: 32 89 770 700

Tel: 32 89 770 700 Fax: 32 89 770 777

### **ASIA PACIFIC**

#### **AUSTRALIA**

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

#### **CHINA**

Graco Hong Kong Ltd.
Shanghai Representative Office
Building 7
1029 Zhongshan Road South
Huangpu District
Shanghai 200011
The People's Republic of China
Tel: 86 21 649 50088
Fax: 86 21 649 50077

#### INDIA

India Liaison Office
Room 432, Augusta Point
Regus Business Centre 53
Golf Course Road
Gurgaon, Haryana
India 122001
Tel: 91 124 435 4208
Fax: 91 124 435 4001

#### JAPAN

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

#### KOREA

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

All written and visual data contained in this document are based on the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

Graco is certified ISO 9001.

Europe +32 89 770 700 FAX +32 89 770 777 WWW.GRACO.COM