

LubePro™ Series Pumps

For Simple, Injector-Based Automatic Lubrication Systems



The Choice of Lubrication Professionals

As a hard-working professional focused on ensuring your production lines keep moving and your operating costs are minimized, automatic lubrication should be an essential part of your machine maintenance. Without proper lubrication, your equipment may suffer from downtime and a reduced service life, which impacts your company's bottom line. Avoid the hassle. Meet your LubePro™.

Built to Last. Built to Perform.

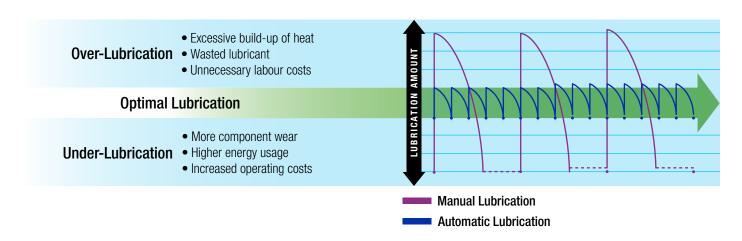


Field-Proven Reliability

For nearly 50 years, Graco Fire-Ball[™] pumps have been a mainstay in the lubrication marketplace for durability and long life. Designed for the toughest applications, the Fire-Ball[™] repeatedly delivers field-proven reliability. LubePro[™] series pumps leverage the same proven quality and leading technology.

Performance

LubePro[™] series pumps offer a robust solution where high output and fast lubrication cycles and flow rates are needed to lubricate equipment as effectively as possible while in operation. Our robust design has been tested and designed to perform.



Positive Impact on Your Bottom Line

LubePro[™] is the choice of lubrication professionals, because it has a positive impact on your company's bottom line by automatically providing the ideal amount of lubrication at the right time.

- Extends equipment life
- Improves productivity
- Reduces downtime
- · Reduces repair costs
- Reduces operating costs
- Improves employee safety

Typical Applications

- Packaging
- Food and Beverage Processing and Packaging
- · Glass Manufacturing
- Tire Production
- Thermoforming
- Injection Moulding

- Paper Production
- Labelers
- Automation Machinery
- Presses
- Steel Forging and Finishing
- · Bearing Manufacturing





LubePro™ Reciprocating Pump

A4000



Technical Specifications				
	A4000			
Fluid Handling Capabilities	40 cSt oil - #2 grease			
Maximum Working Pressure	276 bar (4,000 psi)			
Pressure Ratio	40:1			
Pump Output Per Stroke	819 cm³ (50 in³)			
Maximum Air Inlet Pressure	6.89 bar (100 psi)			
Air Inlet Size	1/4 in. NPT			
Fluid Outlet Size	1/4 in. NPT			
Operating Temperature	-10° C - 65° C (14° F - 149° F)			

Ordering Information							
				NPT			
Pump Model	Fluid	Pressure Ratio	Reservoir Size	Low Level Detection	Pneumatic Vent Valve	Electric Vent Valve	Series Progressive
	Oil		5.5 litres	_	17P752	17T195	17T178
	Oii		J.J IIII 65	Yes	17P753	17T196	17T179
A4000		40:1	3.4 kg	_	17P750	17T193	17T176
	Grease		(7.5 lb)	Yes	17P751	17T194	17T177
			7.7 kg (13 lbs)	Yes	17U217	-	-

LubePro™ Vertical Pumps

A2800 and A2900

High-strength, shatter-resistant reservoir

Utilizes a high-quality, polycarbonate reservoir

Self-venting pump

Integrated vent automatically relieves pressure on return stroke, no pressure switch or wiring required

Easy to Install

Utilize existing mounting holes for easy replacement and installation

Simple Controlling

PLC or Lube controller actuates a 3-way air valve to drive pump, and vent on the return stroke

Pneumatic Power

Easily installed into existing air line

Technical Specifications A2800 A2900 Fluid Handling Capabilities 40 cSt oil minimum Up to #2 grease Maximum Working Pressure 241 bar (3,500 psi) 241 bar (3,500 psi) Pressure Ratio Pump Output Per Stroke 9.18 cm3 (0.56 in3) 9.5 cm3 (0.58 in3) Maximum Air Inlet Pressure 12.1 bar (175 psi) 12.1 bar (175 psi) Air Inlet Size Fluid Outlet Size 1/4 in. NPT -10° C - 65° C (14° F - 149° F) Operating Temperature

Fast cycle rate and flow

ePro A2800

24Z028

Cycles and vents lubricant injectors in as little as 10 seconds. 0.56 in³ of oil per stroke and 0.58 in³ of grease per stroke.

Multiple Reservoir Types

Oil without follower plate - 0.6 and 2 liter Grease with follower plate - 1 and 4 lb.

Low Level Detection

Reliable, Graco factory-installed low level indicator that is easy to connect using a simple DIN connection.



Ordering Ir	formation						
				Ni	PT	BS	PP
Pump Model	Fluid	Pressure Ratio	Reservoir Size	Pump Without Low Level	Pump With Low Level	Pump Without Low Level	Pump With Low Level
			0.6 litres	24Z020	24Z021 (NO)	24Z023	24Z024 (NO)
V30UU	A2800 Oil 2	28:1		242020	24Z022 (NC)	242023	24Z025 (NC)
AZOUU		20.1	2 litres	24Z026	24Z027 (NO)	24Z029	24Z030 (NO)
					24Z028 (NC)		24Z050 (NC)
			0.45 kg	247051	24Z052 (NO)	247054	24Z055 (NO)
A2900	A0000 Crasss	00.1	(1 lb)	242051	24Z053 (NC)	242054	24Z056 (NC)
AZSUU	A2900 Grease	29:1	1.81 kg	247057	24Z058 (NO)	0.47000	24Z061 (NO)
			(4 lb)	24Z057	24Z059 (NC)	24Z060	24Z062 (NC)

LubePro[™] Horizontal Pumps

H1900, A1900 and A2600

Two reservoir types

2 liter reservoir available in grease or oil. Select from the 19:1 oil pump or the 26:1 grease pump.

High-strength, shatter-resistant reservoir

Utilizes a high-quality, polycarbonate reservoir that is securely mounted to the pump with rigid tie rods for optimal sealing

Easy to install

Utilize existing mounting holes for easy replacement and installation

Fire-Ball pump casting

Leverages the proven quality and long life of Graco's Fire-Ball pump. Eliminates tie rods and end cap.

Low level detection option

Reliable, Graco factory-installed low level indicator that is easy to connect using a simple DIN connection

Fast cycle rate and flow

LubePro A26

17C750

Cycles and vents lubricant injectors in as little as 10 seconds. 2.2 in³ of grease per stroke and 3.0 in³ of oil per stroke.

Self-venting pump

Integrated vent automatically and reliably relieves pressure on return stroke, no pressure switch or wiring required

No priming required

No need to bleed the valve to prime the pump, no priming is required

Pneumatic Power

Easily installed into existing air line

Technical Specifications					
	H1900	A1900	A2600		
Fluid Handling Capabilities	40 cSt oil minimum	40 cSt oil minimum	Up to #2 grease		
Maximum Working Pressure	241 bar (3,500 psi)	241 bar (3,500 psi)	241 bar (3,500 psi)		
Pressure Ratio	19:1	19:1	26:1		
Pump Output Per Stroke	49.16 cm ³ (3.0 in ³)	49.16 cm ³ (3.0 in ³)	36.05 cm ³ (2.2 in ³)		
Maximum Air Inlet Pressure	12.8 bar (185 psi)	12.8 bar (185 psi)	9.3 bar (135 psi)		
Air Inlet Size		1/4 in. NPT			
Fluid Outlet Size	3/4 in. NPT				
Operating Temperature	-10° C - 65° C (14° F - 149° F)				

formation						
			Ni	PT	BSPP	
Fluid	Pressure Ratio	Reservoir Size	Pump Without Low Level	Pump With Low Level	Pump Without Low Level	Pump With Low Level
Oil	19:1	_	24Y498	24Y499	25Y498	25Y499
Oil	10:1	1.81 kg	170752	17C752 (NO)	190752	18C752 (NO)
Oii	19.1	(4 lb)	170733	19C752 (NC)	100733	20C752 (NC)
00.1 0.14	00.4	170750	170750	17C751 (NO)	100750	18C751 (NO)
Grease	∠0:1	∠ iitres	176750	19C751 (NC)	100/50	20C751 (NC)
	Fluid	Fluid Pressure Ratio Oil 19:1 Oil 19:1	Fluid Pressure Ratio Reservoir Size Oil 19:1 - Oil 19:1 1.81 kg (4 lb)	Ni	NPT Fluid Pressure Ratio Reservoir Size Pump Without Low Level Low Level	NPT BS



LubePro™ Single Stroke Pump

A900

High-strength, shatter-resistant reservoir

Utilizes a high-quality, polycarbonate reservoir that is securely mounted to the pump with rigid tie rods for optimal sealing

Low level detection option

Reliable, Graco factory-installed low level indicator

Large-capacity oil pump

9:1 oil pump with 2.8 litre capacity

Fast cycle rate and flow

Cycles and vents lubricant injectors in as little as 10 seconds and provides 1.5 in³ of oil per stroke

Self-venting pump

Integrated vent automatically relieves pressure on return stroke, no pressure switch or wiring required

Pneumatic Power

Easily installed into existing air line

Technical Specifications	
	A900
Fluid Handling Capabilities	40 cSt oil minimum
Maximum Working Pressure	93.1 bar (1,350 psi)
Pressure Ratio	9:1
Pump Output Per Stroke	24.58 cm ³ (1.5 in ³)
Maximum Air Inlet Pressure	10.3 bar (150 psi)
Air Inlet Size	1/4 in18 NPSF
Fluid Outlet Size	1/4 in18 NPT
Operating Temperature	-20° C - 65° C (-4° F - 149° F)

Ordering	Information				
				NI	PT
Pump Model	Fluid	Pressure Ratio	Reservoir Size	Pump Without Low Level	Pump With Low Level
A900	Oil	9:1	2.8 litres	24X717	24X694



GL Series Grease and Oil Injectors

Higher Quality, Higher Performance

Choose durable, long-lasting Graco injectors to perform your lubrication automatically and minimizes downtime and maintenance costs.

- Long-life seals
- One-piece, machined body
- Seven outlet fitting sizes
- · Adjustable injector output
- Visual indicator pin
- Wide range of manifold options



Technical Specifications						
	GL-32	GL-43	GL-33	GL-42		
Maximum operating pressure	241 bar (3500 psi)	69 bar (1000 psi)	241 bar (3500 psi)	69 bar (1000 psi)		
Minimum operating pressure	83 bar (1200 psi)	52 bar (750 psi)	83 bar (1200 psi)	52 bar (750 psi)		
Typical operating pressure	103 bar (1500 psi)	59 bar (850 psi)	103 bar (1500 psi)	59 bar (850 psi)		
Reset pressure	13.7 bar (200 psi)	10 bar (150 psi)	13.7 bar (200 psi)	10 bar (150 psi)		
Output volume per cycle	0.02 - 0.13 cm ³	0.02 - 0.13 cm ³ (0.001 - 0.008 in ³) 0.02 - 0.05 cm ³ (0.001 - 0.003 in ³)				
Maximum temperature rating		176° C (350° F)				
Recommended fluids	Grease, up to NLGI #2	Oil, SAE 10 minimum weight	Grease, up to NLGI #2	Oil, SAE 10 minimum weight		

Ordering Information

GL-32 and GL-43

	Carboi	Stainless	
Number of Injectors	GL-32	GL-43	GL-32
1	24A921	24E241	24E391
2	24A922	24E242	24E392
3	24A923	24E243	24E393
4	24A924	24E244	24E394
Standalone	24A919	24E240	24E389
Replacement	24A920	24E245	24E390

GL-33 and GL-42

	Carbon	Stainless	
Number of Injectors	GL-33	GL-42	GL-33
1	24W401	24W801	24W601
2	24W402	24W802	24W602
3	24W403	24W803	24W603
4	24W404	24W804	24W604
5	24X302	24X306	24X304
6	24W405	24W805	24W605
9	24W406	24W806	N/A
10	24W407	24W807	24W606
15	24W408	24W808	24W607
Standalone	24W487	24W493	24W489
Replacement	24W483	24W491	24W485

GL-32, GL-33, GL-42 and GL-43 Outlet Fittings

17B168	JIC-4 male outlet, carbon steel
17B169	JIC-4 male outlet, stainless steel
17B780	1/8 NPT(f) outlet, carbon steel
17B781	1/8 NPT(f) outlet, stainless steel
17B879	1/8 OD tube, push to connect
17B880	1/4 OD tube, push to connect
24F513	4 mm OD outlet tube, carbon steel
24F555	4 mm OD outlet tube, stainless steel
24B677	1/8 OD outlet tube, carbon steel
24F943	1/8 OD outlet tube, stainless steel
24F514	6 mm OD outlet tube, carbon steel
24F556	6 mm OD outlet tube, stainless steel
17B782	Outlet closure plug, carbon steel
17B783	Outlet closure plug, stainless steel

Graco GL-1 Series injectors can also be used with the LubePro Series pumps. See Graco's Industrial Lubrication Equipment Buyer's Guide for ordering information.

LubePro[™] Accessories

Air Valves

- 3-way air valves available for A900, A2800, and A2900 Vertical Oil Pumps
- 4-way air valves available for A1900, H1900, and A2600 Horizontal Pumps



Ordering I	nformation
215407	3-way air solenoid valve, 10 bar (150 psi), (1/2 npsm(f) conduit ports for wiring; 1/4 npt(f) air ports, adapted to 3/8(f) IN, 3/8(m) OUT) operates on 24V DC and 110 VAC.
105474	3-way air solenoid valve (bare), 10 bar (150 psi), same as 215407 but without wire connectors or adapters. 1/2 npsm(f) conduit ports for wiring, 1/4 npt(f) air ports. 10.3 bar (150 psi) maximum working pressure.
563315*	3-way pneumatic solenoid valve, 115 VAC
563332*	3-way pneumatic solenoid valve, 24 VDC
128305	4-way air valve, 12 VDC
128254	4-way air valve, 24 VDC
128255	4-way air valve, 110 VAC
128257	4-way air valve, 220 VAC
560734	Air valve reservoir mounting bracket
24Y079	4-way air valve installation kit – 12 VDC air valve, bracket, air lines, fittings
24Y080	4-way air valve installation kit – 24 VDC air valve, bracket, air lines, fittings
24Y081	4-way air valve installation kit – 110 VAC air valve, bracket, air lines, fittings
24Y082	4-way air valve installation kit – 220 VAC air valve, bracket, air lines, fittings

^{*}For use with A900 only.

24N468

24P314

24W981 24P686

24P687

24B591 24B596

24N181

Ordering Information

GLC 2200 controller

GLC 2200 wiring harness - 150 cm (5 feet), flying leads GLC 2200 wiring harness - 300 cm (10 feet), flying leads

GLC 2200 connector (1) and pins (12) GLC 2200 connectors (5) and pins (60)

GLC 4400 controller, 9-30 VDC

GLC 4400 controller, 100-240 VAC

Controllers

GLC2200 or GLC4400 lubrication controllers are available.





Pressure Switches

Not required, but can be used as an alarm to detect whether the pressure is achieved or not.



	Ordering Information		
	24K414	Set pressure range 20-40 bar (290-580 psi), reset pressure range 12-392 bar (175-5,685 psi), M12 connector (female), 9.6-32 VDC, $1/4$ inch (7.6 cm) npt thread (male)	
	115124	Single post pressure switch	
	558947	Dual post control pressure switch	
	24N180	IP65 rated. Fluoroelastomer seals. Din connector. 40-400 bar (580-5,800 psi).	

IP65 rated. Fluoroelastomer seals. Din connector. 40-400 bar (580-5,800 psi).

1/4 inch npt inlet.

Visit www.graco.com for additional switch options.

Air Filter - Regulator - Lubricators

Not required, but can be used in-line to protect and extend system component life.

Coupler

Quick-disconnect coupler used to fill grease reservoirs on A2600 and A2900.



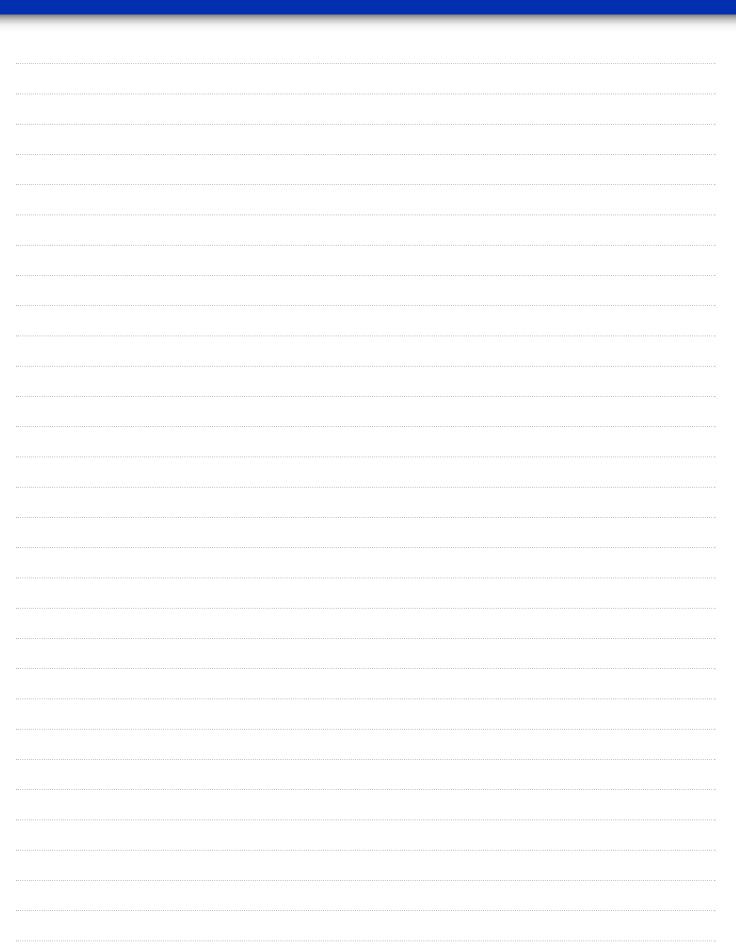
Ordering Information

Kit includes 20 micron air filter (110146), regulator (110318), 21 bar (300 psi) WPR maximum lubricator (110148), and pressure gauge (110319). 1/4 inch npt inlet/outlet.

Ordering Information

121474 Female coupler. Quick-disconnect. 1/4 inch npt.

Notes





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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