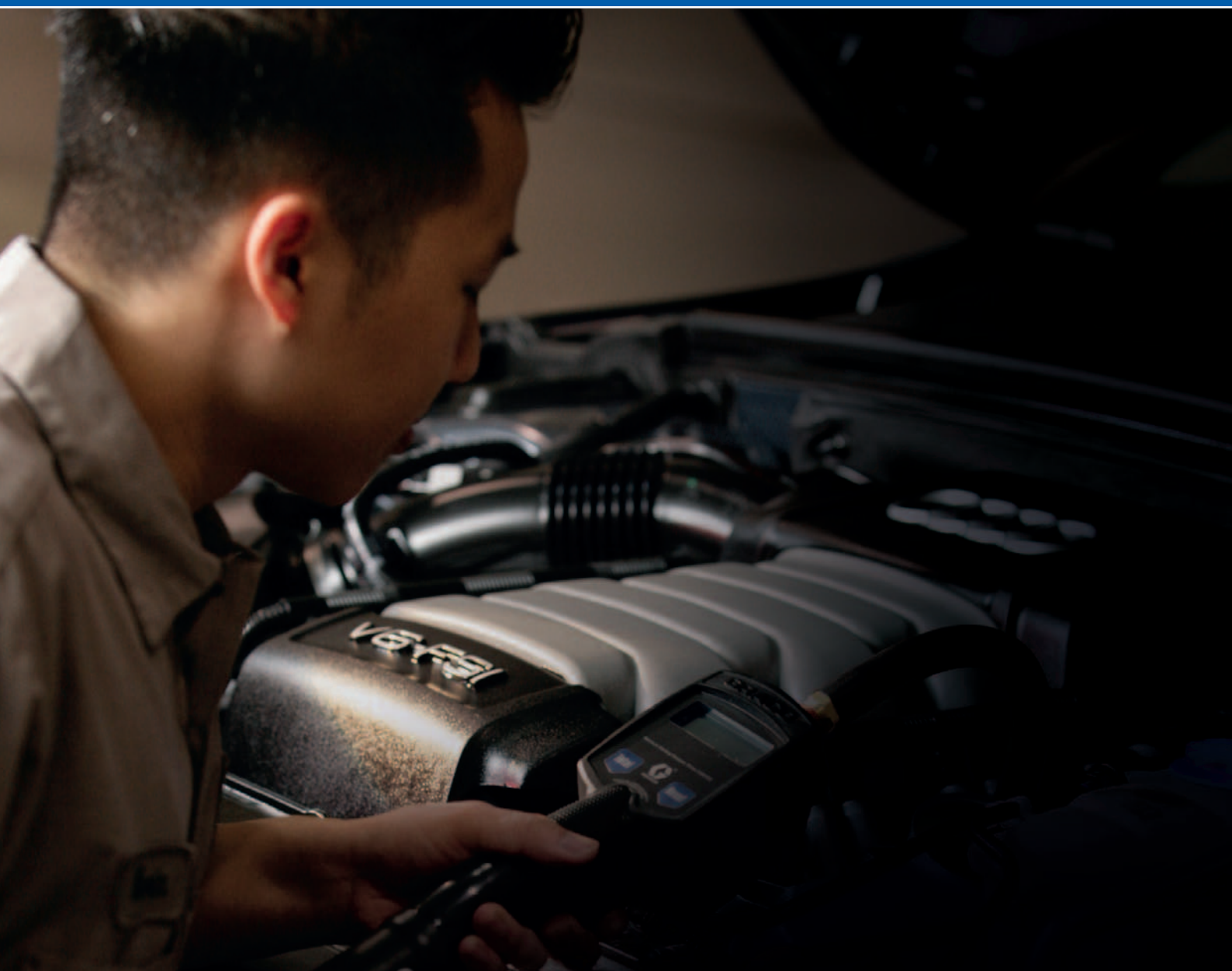




Graco LD™ Series

A complete family of reliable Lubrication Equipment
Discover the value of Graco LD™ Series



PROVEN QUALITY. LEADING TECHNOLOGY.

Performance Runs in the Family

State-of-the-Art Design

Each product in the LD family has innovative features built-in, plus advanced technologies designed to save you money and provide reliable performance and long life at a competitive price.

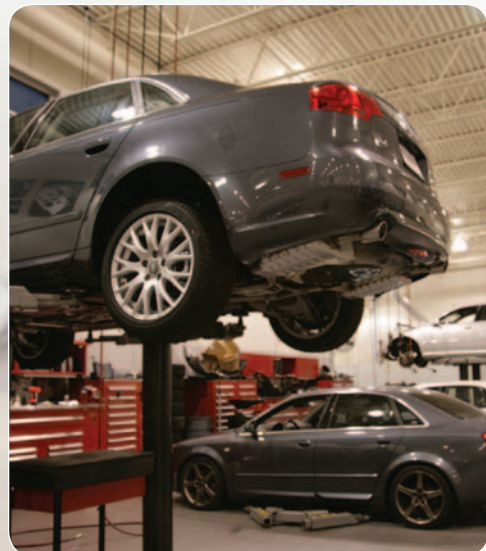
More Configurations

Choose drum, tote or wall mount applications with multiple meter, pump and reel choices

Industry Leading Warranty

Graco offers one of the best warranties in the business—5 years on all our LD Series family products.*

* Two years on LD Meter electronics



Everything you need right out of the box

Choose from a variety of dispensing solutions. From the economical drum package to the high-performance tote packages, every solution is designed with the highest quality components for trouble free operation.

LD Series Pumps

Durable and Hardworking

Stay ahead of the competition with LD Series Pumps. These affordable and full featured pumps are designed for lower volume applications and are available in 3:1 and 5:1 for oil and 50:1 for grease. These pumps are fine-tuned for a compact, flexible and still incredibly durable solution.



LD Series Reels

Get More for Less Money

LD Series Hose Reels come with more—the enclosure is built-in. One piece design protects internal components from the elements and extends hose life. Inside, the full flow swivel maximizes fluid output while minimizing pressure loss. Unlike other reels, you can easily increase or decrease spring tension while the hose is pressurized.

LD Series Meters

Big Performance for Small Shops

LD Series meters are designed for professionals that require reliable performance on every dispense. Flow rates up to 19 lpm (5 gpm) and working pressure up to 69 bar (1000 psi) gives you the performance and power you need everyday. Choose from two models—the LD manual or LD preset, each equipped to dispense in liters, quarts, gallons or pints.



LD Pumps

It's Genetics

LD Air-Powered Pumps

LD 3:1 Pump

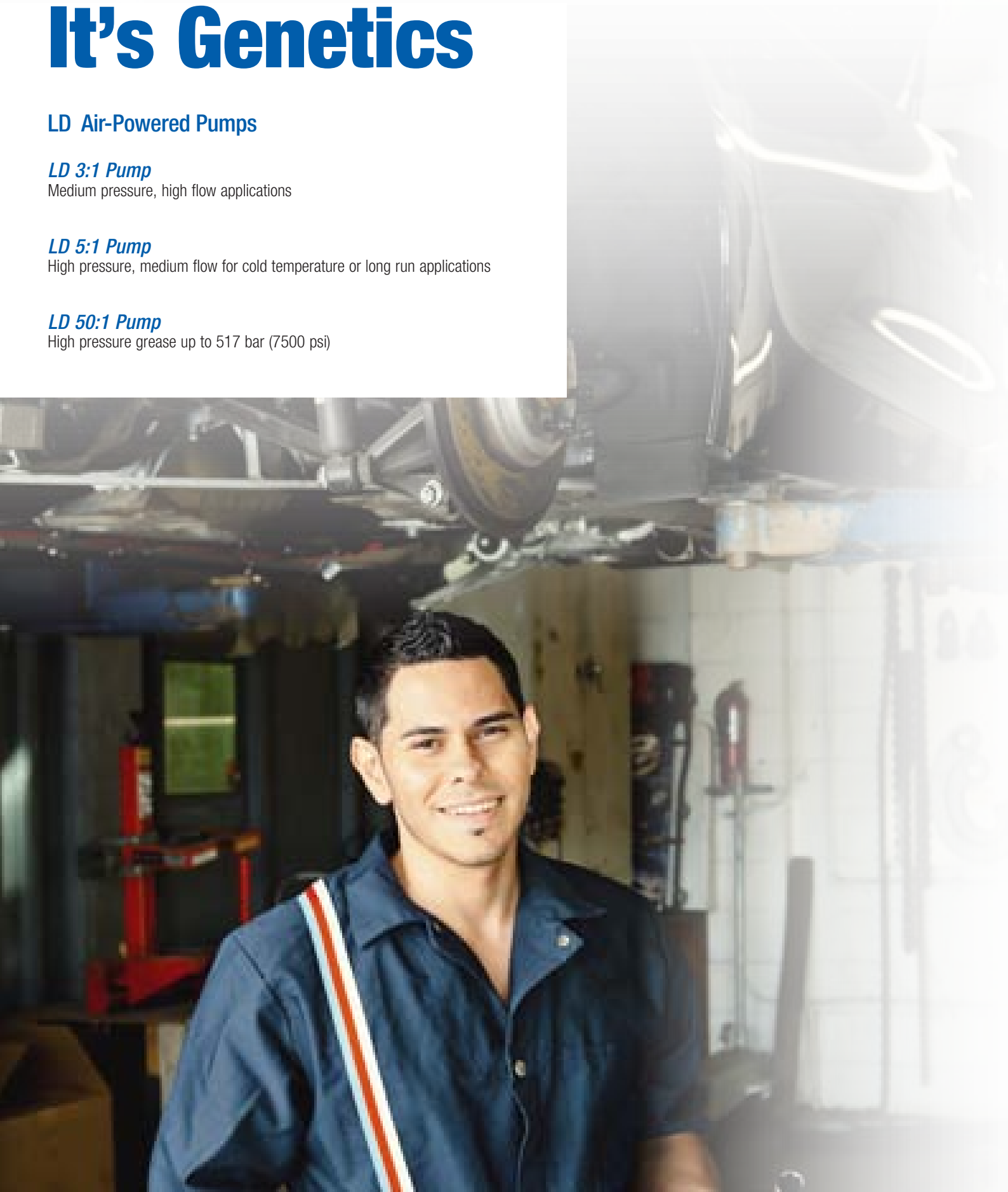
Medium pressure, high flow applications

LD 5:1 Pump

High pressure, medium flow for cold temperature or long run applications

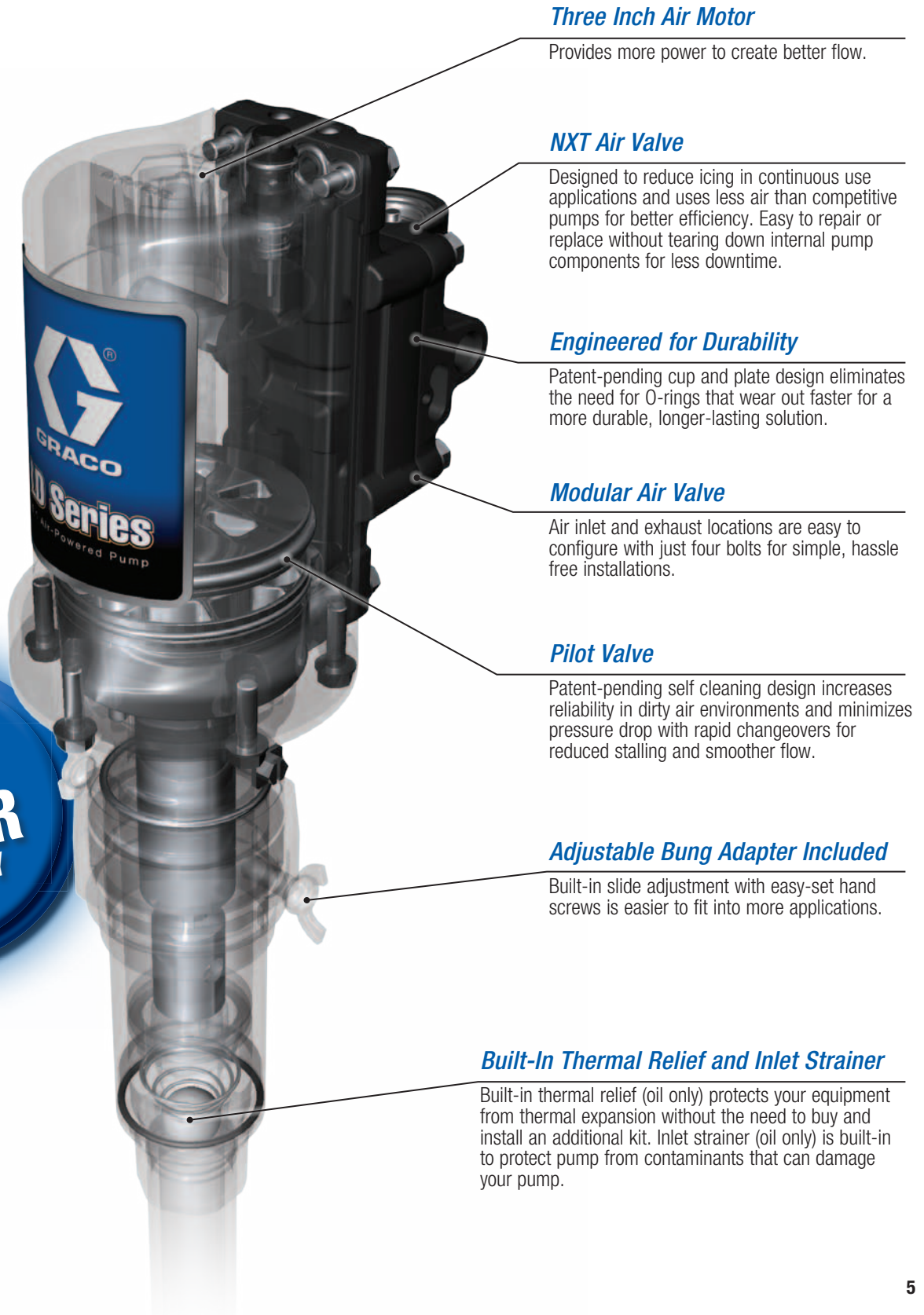
LD 50:1 Pump

High pressure grease up to 517 bar (7500 psi)



Loaded with high performance technologies

Only Graco can give you the field-proven performance found in the famous Fire Ball™ pump for a solution that works as hard as you. Fast repairs, flexible configuration, industry leading warranty, and so many other field proven features are built-in—all at a competitive price.



Three Inch Air Motor

Provides more power to create better flow.

NXT Air Valve

Designed to reduce icing in continuous use applications and uses less air than competitive pumps for better efficiency. Easy to repair or replace without tearing down internal pump components for less downtime.

Engineered for Durability

Patent-pending 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 Valve

Patent-pending self cleaning design increases reliability in dirty air environments and minimizes pressure drop with rapid changeovers for reduced stalling and smoother flow.

Adjustable Bung Adapter Included

Built-in slide adjustment with easy-set hand screws is easier to fit into more applications.

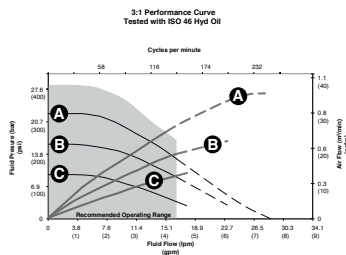
Built-In Thermal Relief and Inlet Strainer

Built-in thermal relief (oil only) protects your equipment from thermal expansion without the need to buy and install an additional kit. Inlet strainer (oil only) is built-in to protect pump from contaminants that can damage your pump.

Technical Specifications

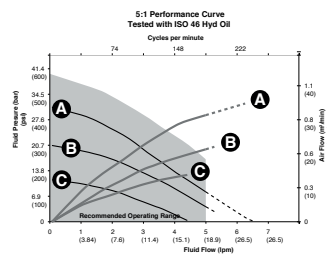
LD SERIES 3:1, 5:1 AND 50:1 AIR-POWERED PUMPS

**LD Series 3:1
Oil Pump**



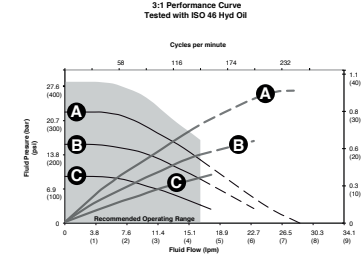
Inlet Air Pressures:
A = 6.9 bar (100 psi)
B = 4.8 bar (70 psi)
C = 2.8 bar (40 psi)

**LD Series 5:1
Oil Pump**



Inlet Air Pressures:
A = 6.9 bar (100 psi)
B = 4.8 bar (70 psi)
C = 2.8 bar (40 psi)

**LD Series 50:1
Grease Pump**



Inlet Air Pressures:
A = 6.9 bar (100 psi)
B = 4.8 bar (70 psi)
C = 2.8 bar (40 psi)

Tested with ISO 46 Hydraulic Oil. Inlet air pressures: A = 6.9 bar (100 psi) B = 4.8 bar (70 psi) C = 2.8 bar (40 psi).

	3:1 LD OIL PUMP	5:1 LD OIL PUMP	50:1 LD GREASE PUMP
Maximum Fluid Working Pressure	31 bar (450 psi, 3.10MPa)	51.7 bar (750 psi, 5.17MP a)	517 bar (7500 psi, 51.7 MPa)
Fluid Pressure Ratio	3:1	5:1	50:1
Suction Lift (feet of oil)	10	10	—
Air Operation Range	1.37 to 10.3 bar (20 to 150 psi)	1.37 to 10.3 bar (20 to 150 psi)	1.37 to 10.3 bar (20 to 150 psi)
Recommended Air Pressure (for optimum life)	< 8.6 bar (125 psi, 0.86 MPa)	< 8.6 bar (125 psi, 0.86 MPa)	< 8.6 bar (125 psi, 0.86 MPa)
Max Recommended Pump Speed	120 cycles per minute	180 cycle per minute	120 cycle per minute
Cycles Per l/kg (Gallon/pound)	7 cycles per liter (29 cycles per gallon)	10 cycles per liter (37 cycles per gallon)	103 cycles per kg (47 cycles per pound)
Recommended Pump Speed (for maximum life)	75 cycles per minute or lower	75 cycles per minute or lower	60 cycles per minute or lower
Wetted Parts	Zinc plated carbon, steel, aluminum, nitrile, polyurethane, nickel plated aluminum		Steel, brass, nitrile rubber, polyurethane, UHMWPE, acetal
Sound Pressure Level	72.9 dB(a)	72.9 dB(a)	72.9 dB(a)
Sound Power Level	82 dB(a)	82 dB(a)	82 dB(a)
Approximate Weight	3.2 kg (7 pounds)	3.5 kg (7.7 pounds)	16 kg drum - 5.1 kg, 54 kg drum - 6.8 kg, 181 kg drum - 7.7 kg
Air Inlet	1/4"	1/4"	1/4"
Fluid Inlet	1"	1"	Priming Piston
Fluid Outlet	1/2"	1/2"	1/4"
Free Flow*	34 lpm	25 lpm	1,87 kg/min

*Free flow at 10.3 bar (150 psi) air inlet pressure, using SAE 20 oil at 21 °C (70° F)

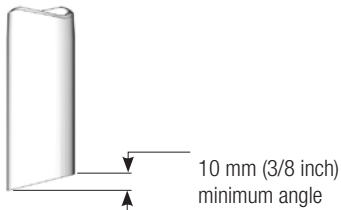
Technical Specifications

LD SERIES 3:1 AND 5:1 AIR-POWERED PUMPS

Dimensions

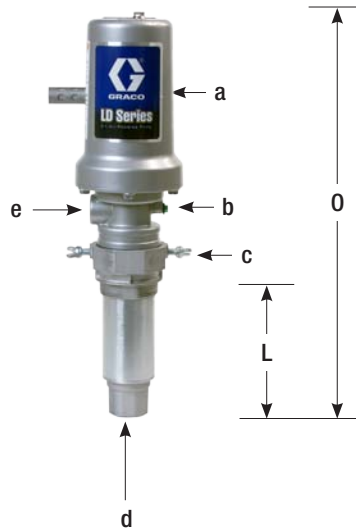
Model	L Length	O Overall Length
Universal Pump Only	175 mm (6.9 in)	406 mm (16 in)
Multi*	1076 mm (42.4 in)	1307 mm (51.5 in)
Drum	907 mm (35.7 in)	1138 mm (44.8 in)
Tote	1087 mm (42.8 in)	1318 mm (51.9 in)

- a = 1/4 inch air inlet
- b = ground screw
- c = 2 inch npt bung adapter
- d = 1 inch fluid inlet
- e = 1/2 inch fluid outlet

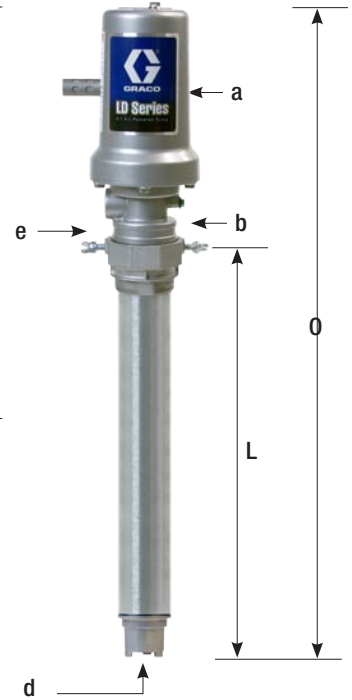


* Multi down tube is angle cut to the desired length as required

LD Series
3:1/5:1 Oil

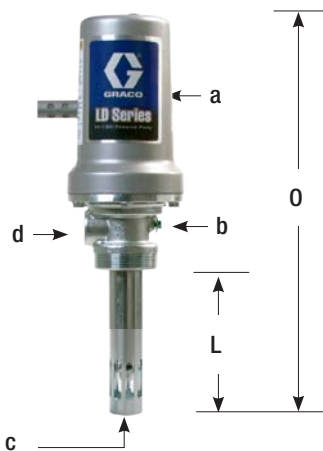


LD Series
3:1/5:1 Oil Multi/Drum/Tote

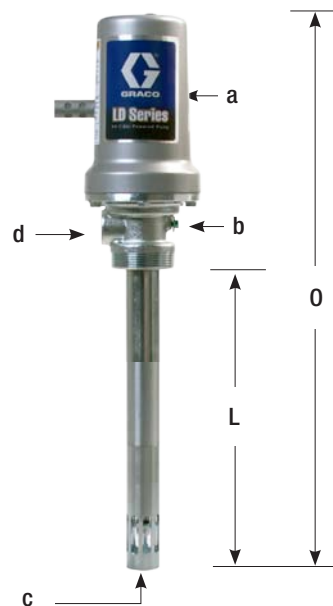


Model	L Length	O Overall Length
16 kg Drum	370 mm (14.5 in)	600 mm (23.6 in)
54 kg Drum	715 mm (28.1 in)	945 mm (37.2 in)
181 kg Drum	915 mm (36 in)	1145 mm (45 in)

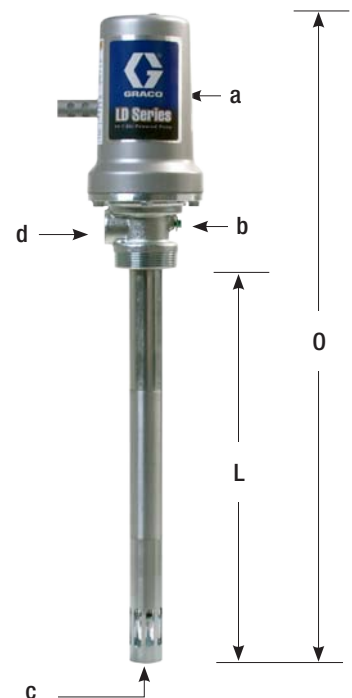
LD Series
16 kg Drum



LD Series
54 kg Drum



LD Series
181 kg Drum



- a = 1/4 inch air inlet
- b = ground screw
- c = priming piston
- d = 1/4 inch fluid outlet

LD Enclosed Hose Reels



Simple to install—mounts in minutes!

- Enclosed reel for safety and protection—compact enclosure extends hose life
- Full flow swivel—maximizes fluid output while minimizing pressure loss
- Easily add or decrease spring tension while pressurized



Reduce clutter and increase workplace safety with a Graco one piece hose reel.

Designed for dealerships, service garages, collision repair and industrial manufacturing facilities. Quickly mounts to wall, ceiling, bench, tanks or in cabinets.

Complete packages available with LD oil meters and hose inlet kit to get you up and running fast!

Economical hose reel gets you up and running - fast!

Quality hose reels mount in minutes - gives you years of worry-free performance!

ORDERING INFORMATION*

Application	Model	Hose Inlet Kit (BSPT)	Hose Inlet Kit (NPT)**
Air Only	HEL13D	24C437	24C443
	HEL15D	24C437	24C443
Air/Water	HEL23D	24C438	24C444
	HEL25D	24C438	24C444
	HEL33D	24C438	24C445
	HEL34D	24C438	24C445
Petroleum- and Synthetic-based Oils	HEM23D	24C440	24C537
	HEM33D	24C440	24C538
Grease	HEH13D	24C442	24C539

*Inlet kits ordered separately

**Includes two fittings to convert BSPT(m) to NPT(m)

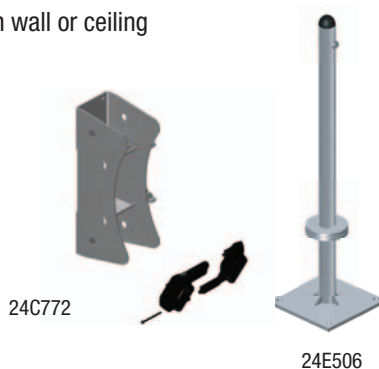
OIL DISPENSING PACKAGES (Reel, Meter, Inlet Hose)

Package number	LD Reel	Hose Inlet Kit	Valve/Meter
24D197	HEM33D	24C538	256215, LDM5 Rigid with trigger guard
24D198	HEM33D	24C538	255751, LDM5 Flex without trigger guard
24D199	HEM33D	24C538	256216, LDP5 Rigid with trigger guard
24D200	HEM33D	24C538	255277, LDP5 Flex without trigger guard

ACCESSORIES

Includes all parts to bench-, table- or tank top mount reel on wall or ceiling

Part Number	Mounting Options
24C772	Tote, bench or wall mount post
24E506	Fixed installation kit



Ceiling/Wall Swivel Mount (standard)



Ceiling/Wall Stationary Mount (optional)



Bench Mount (optional)

TECHNICAL SPECIFICATIONS

Application	Model	Pressure bar (psi)	Hose ID x Length	Inlet (bspt)	Outlet (bspt)	Operating Temp.
Air Only	HEL13D	17.2 (250)	6 mm x 11 m (1/4 in x 35 ft)	1/2 in	1/4 in	-10–60 °C (-14–140 °F)
	HEL15D	17.2 (250)	6 mm x 15 m (1/4 in x 50 ft)	1/2 in	1/4 in	
Air/Water	HEL23D	17.2 (250)	10 mm x 11 m (3/8 in x 35 ft)	1/2 in	3/8 in	-17°–60 °C (-0–140 °F)
	HEL25D	17.2 (250)	10 mm x 15 m (3/8 in x 50 ft)	1/2 in	3/8 in	
	HEL33D	17.2 (250)	12 mm x 11 m (1/2 in x 35 ft)	1/2 in	1/2 in	
	HEL34D	17.2 (250)	12 mm x 14 m (1/2 in x 45 ft)	1/2 in	1/2 in	
Petroleum/ Synthetic-based Oils	HEM23D	124 (1800)	10 mm x 11 m (3/8 in x 35 ft)	1/2 in	3/8 in	
	HEM33D	124 (1800)	12 mm x 11 m (1/2 in x 35 ft)	1/2 in	1/2 in	
Grease	HEH13D	345 (5000)	6 mm x 11 m (1/4 in x 35 ft)	3/8 in	1/4 in	

LD Series Manual and Preset Meters

LDM5 Manual Dispense Meter



Two Models to Choose From

- LDM5 with inlet boot, trigger guard and rigid extension with thermal compensating nozzle
- LDM5 with flexible extension and automatic nozzle

LDP5 Preset Dispense Meter



Two Models to Choose From

- LDP5 preset dispense model with inlet boot, trigger guard and rigid extension with thermal compensating nozzle
- LDP5 preset dispense model with flexible extension and automatic nozzle

Fluid Extension Kits

- Standard rigid extension kit and automatic thermal compensating nozzle
- Optional flexible and gear lube extensions available

Operator Controls

- Easy to read LCD display with durable switches for long life

Meter Body

- Rugged engineered material for superior impact resistance and long life
- Ergonomically-designed handle for optimum comfort

Fluid Inlet Screen

- Replaceable internal inlet screen protects meter from contaminants

Trigger

- Two-finger trigger
- LDP5 models have latching trigger

Trigger Guard and Boot

- Protects finishes from scratching
- Black boot and guard is standard, also available in red, blue, green and yellow

LDP5 Preset Model Shown

Technical Specifications

LD SERIES METERS

Flow range ⁽¹⁾	0.4 to 19 lpm (0.1 to 5 gpm)
Max. working pressure	69 bar (1000 psi)
Units of measure	Liters, Quarts, gallons, pints (factory set to quarts)
Weight	1.36 kg (3 lbs)
Inlet	3/8"
Outlet	1/2 in npt
Operating temperature	0°C to 49°C (32°F to 120°F)
Storage temperature	-34°C to -49°C (-30°F to 120°F)
Battery	9V alkaline
Battery life	LDP5 - six months with alkaline LDM5 - one year with alkaline

1. Tested in 10W oil at 21°C (70°F). Flow rates vary with fluid pressure, temperature, viscosity, inlet fitting and nozzle type.

Wetted Parts	sst, nitrile rubber, zinc, cs, lcp
Meter pressure loss ⁽¹⁾	6.21 bar @ 18.9 lpm (90 psi @ 5 gpm)
Accuracy ⁽²⁾	±0.5%
Dimensions (w/o extension)	28cm x 8.3cm x 8.3cm (11 in L x 3.25 in W x 3.25 in H)
Maximum totalizer	99,999 gallons or liters
Max. recorded dispense	999.99 units
Max. preset volume	99.99 units (LDP5 only)
Warranty	Two years
Instruction manual	312668

2. @ 9.5 lpm (2.5 gpm) @ 21°C (70°F) with 10 wt. oil and 3.8 l (1 gal) dispensed. May require re-calibration. Out-of-box accuracy ±1.25%.

Graco Products—Engineered for Performance

Ordering Information - LD Series Meters

LDM5 MANUAL DISPENSE ELECTRONIC METERS, 19 LPM OR LESS	
Part Number	Description
255751	1/2 in npt(f) swivel, flexible extension and automatic nozzle for oil and anti-freeze
256215	1/2 in npt(f) swivel, rigid extension, trigger guard/boot, and automatic nozzle for oil and anti-freeze

LDP5 PRESET DISPENSE ELECTRONIC METERS, 19 GPM OR LESS	
Part Number	Description
255277	1/2 in npt(f) swivel, flexible extension and automatic nozzle for oil and anti-freeze
256216	1/2 in npt(f) swivel, rigid extension, trigger guard/boot, and automatic nozzle for oil and anti-freeze



Ordering Information - Accessories for LD Series Meters



NOZZLE EXTENSION KITS FOR LD SERIES METERS	
Part Number	Description
255861	Automatic nozzle with flexible extension for oil and anti-freeze*
239949	Automatic thermal compensating nozzle with rigid extension for oil and anti-freeze
239951	Automatic thermal compensating nozzle with flexible extension for oil and anti-freeze
239950	Automatic thermal compensating nozzle with rigid extension for gear lube
239829	Automatic thermal compensating nozzle for oil and anti-freeze without extension
238371	Automatic thermal compensating gear lube nozzle without extension

*Economical extension used on models 255751 and 255277

INLET SWIVEL COVERS FOR LD SERIES METERS	
191294	Black
191287	Red
191288	Blue
191289	Green
191295	Yellow



TRIGGER GUARDS FOR LD SERIES METERS	
247759	Black
243835	Red
243836	Blue
243837	Green
247760	Yellow



FILTERS FOR LD SERIES METERS	
255884	Filter kit includes (10) filters/strainers (114017) and (10) O-rings (109018)



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

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Graco is certified ISO 9001.



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