



Wolverine[®] DA Series Pumps

Electrically Operated Double Acting Pumps for Chemical Injection



PROVEN QUALITY. LEADING TECHNOLOGY.

Wolverine® DA Electrically Operated Pumps

Features and Benefits

The Wolverine DA uses a double acting pump fluid section that helps achieve double the flow of a similar single acting pump. It is also self-priming so the pump can purge itself from any trapped air and resume operation without physically being at the pump. The fluid sections are universal and can be used with pneumatic and electric drives. The Wolverine DA mounts directly on a pole, eliminating a need for a stand.

The pump uses a brushless motor which helps keep power draw at a minimum plus it comes with variable speed control right on the motor. The DC motor options are UL classified to Class 1, Division 2 for Hazardous Location applications.

Double Acting

- Pumps fluid in both directions of the stroke for increased flows
- Provides continuous flow operation for better pump efficiencies
- Doubles the flow of a similar single acting pump

Self Priming

- Anti-locking so air cannot get trapped inside air motor and stall pump
- Pump can free itself of air and resume pumping without any adjustments

Ease of Serviceability

- Simple pump design for quick seals replacement
- Pumps are installed vertically for a reduced footprint
- Pump mounts directly on a pole
- Minimum number of tools required

Variable Speed Motor

- Suitable for applications requiring continuous chemical dosing
- Brushless DC motor helps reduce amperage draw
- Variable speed control eliminates a need for a separate controller

Adjustable Packing Seals

For better sealing and increased pump life

Plunger Rod Design

- Chromex coated plunger comes standard
- Ceramic coated plunger available as an option
- Drive cylinder also coated

Poppet Style Check Valves

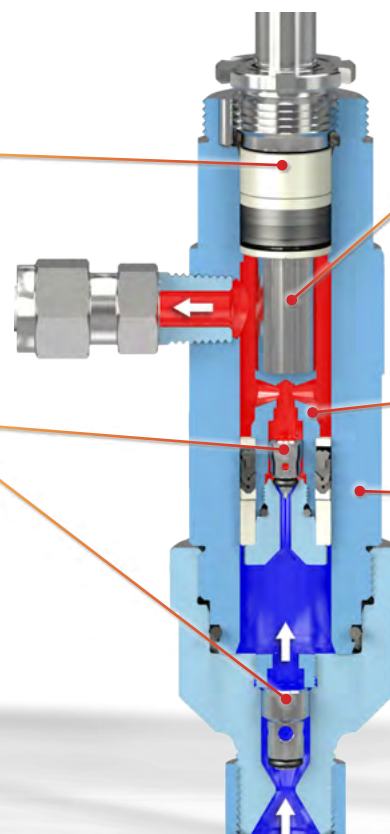
Proprietary design

Hollow Pump Rod Design

Allows for flow in both directions of stroke

Self Priming Double Acting Pump Lower

- Double the flow
- Check valves not required
- Can better handle viscous materials



Ordering Information

Wolverine DA 12 VDC Pump Models Numbers				
Seals / Plunger Size	3/8"	1/2"	3/4"	1"
Chromex Coated Plungers				
HNBR	30A000	30A006	30A012	30A018
FFKM	30A001	30A007	30A013	30A019
TFE/P	30A002	30A008	30A014	30A020
Ceramic Coated Plungers				
HNBR	30A003	30A009	30A015	30A021
FFKM	30A004	30A010	30A016	30A022
TFE/P	30A005	30A011	30A017	30A023

Wolverine DA 24 VDC Pump Model Numbers				
Seals / Plunger Size	3/8"	1/2"	3/4"	1"
Chromex Coated Plungers				
HNBR	30A024	30A030	30A036	30A042
FFKM	30A025	30A031	30A037	30A043
TFE/P	30A026	30A032	30A038	30A044
Ceramic Coated Plungers				
HNBR	30A027	30A033	30A039	30A045
FFKM	30A028	30A034	30A040	30A046
TFE/P	30A029	30A035	30A041	30A047

Wolverine DA 115 VAC Pump Model Numbers				
Seals / Plunger Size	3/8"	1/2"	3/4"	1"
Chromex Coated Plungers				
HNBR	30A048	30A054	30A060	30A066
FFKM	30A049	30A055	30A061	30A067
TFE/P	30A050	30A056	30A062	30A068
Ceramic Coated Plungers				
HNBR	30A051	30A057	30A063	30A069
FFKM	30A052	30A058	30A064	30A070
TFE/P	30A053	30A059	30A065	30A071



Technical Data

Wolverine DA Chemical Injection Pump		
	US	Metric
Maximum fluid working pressure	Varies by model. See Instruction Manual	
Input Voltage		
CI-12B-xx	12 VDC	
CI-24B-xx	24 VDC	
CI-1AD-xx	115 VDC	
Maximum Input Current		
CI-12B-xx	16 A @ 12 VDC	
CI-24B-xx	11 A @ 12 VDC	
CI-1AD-xx	3.0 A @ 110 VAC Single Phase	
Power Connection	See Instruction Manual	
Environmental temperature range (for CI-1AD-xx)	-40° – 176°F	-40° – 80°C
Environmental temperature range (for CI-12B-xx and CI-24B-xx)	-4° – 104°F	-20° – 40°C
Noise (dBa)		
Maximum sound pressure	<70 dBa	
Inlet/Outlet Sizes		
Fluid inlet size (3/8 in. & 1/2 in. plungers)	1/2 in. npt(m)	
Fluid inlet size (3/4 in. plunger)	3/4 in. npt(m)	
Fluid inlet size (1 in. plunger)	1 in. npt(m)	
Fluid outlet size (3/8 in., 1/2 in., and 3/4 in. plungers)	1/4 in. npt(f)	
Fluid outlet size (1 in. plunger)	1/2 in. npt(f)	
Materials of Construction		
Pump/Check Valve Seal Material	See Configuration Chart in manual for seal material. All other packing materials are PEEK and PTFE unless otherwise noted.	
Wetted Parts	See Configuration Chart in manual for plunger material. All other materials are 316 stainless steel unless otherwise noted.	
Weight		
All Models	31 lbs.	14 kg

Configuration Number Matrix

Check the identification plate (ID) for the 12-digit Configuration Number of your pump. Use the following matrix to define the components of your pump. *NOTE: Not all combinations are possible.*

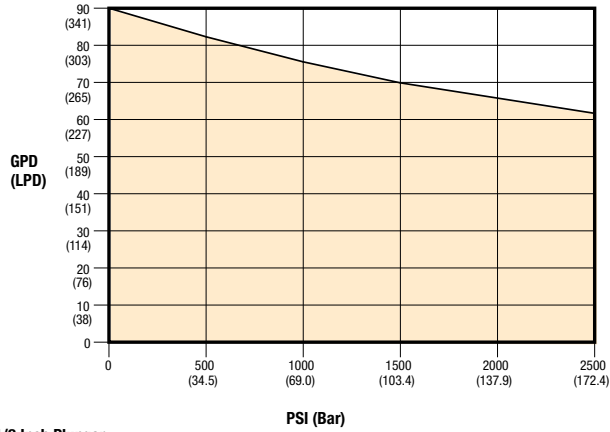
Sample Configuration Number: **CI-12-B-038-025-X-C**

CI	12	B	038	025	X	C
Chemical Injection	Voltage	Motor	Pump Lower Primary Seal Size	Pump Lower Secondary Seal Size	Pump Lower Wear Coating	Seal Material

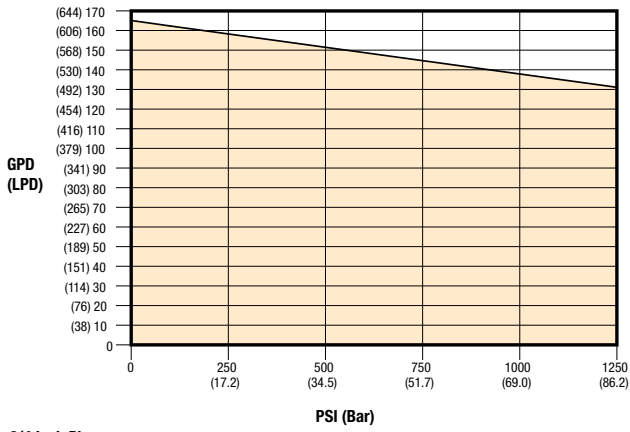
Voltage		Motor		Pump Lower Primary Seal Size (diameter)		Pump Lower Secondary Seal Size (diameter)		Pump Lower Wear Coating		Seal Material	
12	12 VDC	B	Continuous Injection Variable Speed, Brushless CID2	038	3/8"	025	1/4"	X	Chromex	C	HNBR
24	24 VDC	D	Continuous Injection Variable Speed, AC	050	1/2"	050	1/2"	C	Ceramic	D	FFKM
1A	115 VAC			075	3/4"	063	5/8"			E	TFE/P
				100	1"	088	7/8"				

Performance Curves

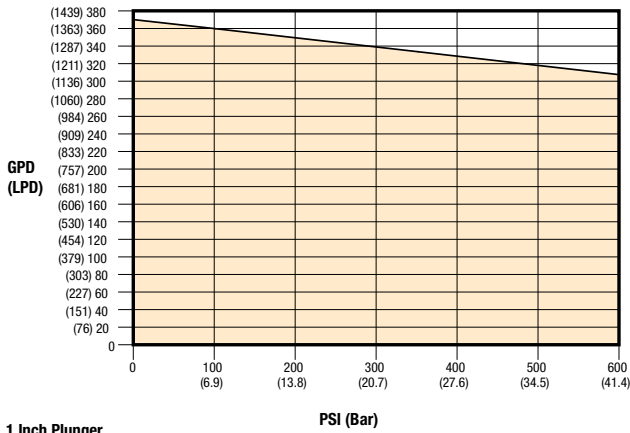
3/8 Inch Plunger



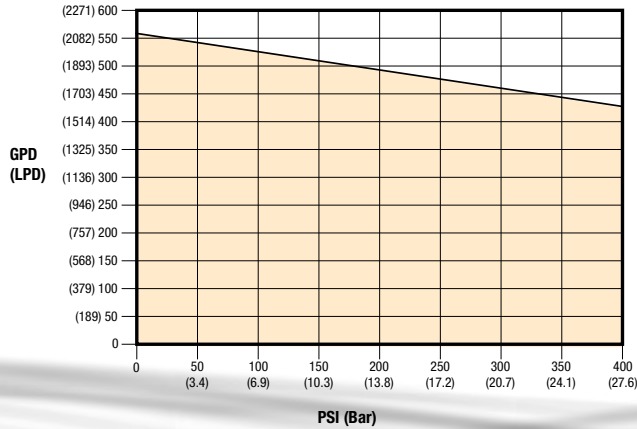
1/2 Inch Plunger



3/4 Inch Plunger



1 Inch Plunger





ABOUT GRACO

PROVEN QUALITY. LEADING TECHNOLOGY.

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
Fax: 32 89 770 777

ASIA PACIFIC

AUSTRALIA

Graco Australia Pty Ltd.
Suite 17, 2 Enterprise Drive
Bundoora, Victoria 3083
Australia
Tel: 61 3 9467 8558
Fax: 61 3 9467 8559

CHINA

Asia Pacific Headquarters
Shanghai Representative Office
Building 7
1029 Zhongshan Road South
Huangpu District
Shanghai 200011
The People's Republic of China
Tel: 86 21 626 05711
Reception Desk:
86 21 649 50088

INDIA

Graco India Pvt Ltd
Plot No 295, Udyog Vihar Phase-IV
Gurugram - 122015 (Haryana)
India 122001
Tel: 91 124 6610200
Fax: 91 124 6610201

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.
438, Samsung 1-ro 1-gil
Hwaseong-si, Gyeonggi-do,
18449
Republic of Korea
Tel: 82 31 476 9400
Fax: 82 31 476 9801

SALES/ DISTRIBUTION/ SERVICE

Call today for product information or to request a demonstration.

866-552-1868 or visit us at www.graco.com/ong

Graco Inc. is registered to I.S. EN ISO 9001

North America
Customer Service
866-552-1868
Fax 877-340-6427