

THOMAS
by Gardner Denver

Small liquid pumps

BIG performance

For your Drop-on-Demand Inkjet Systems



Complementing Your Print Quality

Drop-on-demand inkjet systems are used in a vast range of applications, from wide-format printing to decorative printing on textiles, wood or ceramic tiles. For all of these uses, print quality and system uptime are top priorities. Gardner Denver Thomas supports your goals with a brilliant range of pump solutions.



Large format banner printing

GET THE BEAUTY OF QUALITY

Want to achieve the highest print quality from your inkjet systems? Our liquid pumps are equipped with a resonating diaphragm that minimizes cavitation and air bubbles for smooth and seamless ink transfer. You also get flawless results with our gas diaphragm pumps. They are designed to remove residual gas in the ink, maintain a constant vacuum over the print head to prevent ink dripping from nozzles, and provide positive air to avoid debris or dust from entering the inkjet.

HAVE A GREAT UPTIME

Our pumps are remarkably robust. They offer long-term compatibility with high media temperatures, and superior resistance to chemical or mechanical damage caused by printing inks. Depending on whether water-based, solvent-based, UV-curable or pigmented inks are used, you can choose pump components in the most suitable material, such as EPDM, FKM, PTFE or FFKM.

DESIGN WITHOUT LIMITS

Our liquid diaphragm pumps are extremely versatile, and can be perfectly modified to your exact requirements. You just need one pump to control all the liquids in your system. It can handle a wide range of inks with different viscosities, particles, additives or solvents. And, it may be electronically regulated, and easily adjusted for a variety of printing programs.

PRINT AT THE SPEED OF BUSINESS

Regardless of your customer's printing application, one thing is certain: the quicker, the better. Thanks to their variable pump flow rates and excellent pressure stability, our diaphragm pumps are perfect for high-speed printing. So your customers can get their products to market faster. They are also equipped with low noise emission technology to create a more pleasant working environment for users.



Ceramic tile printing



Textile printing

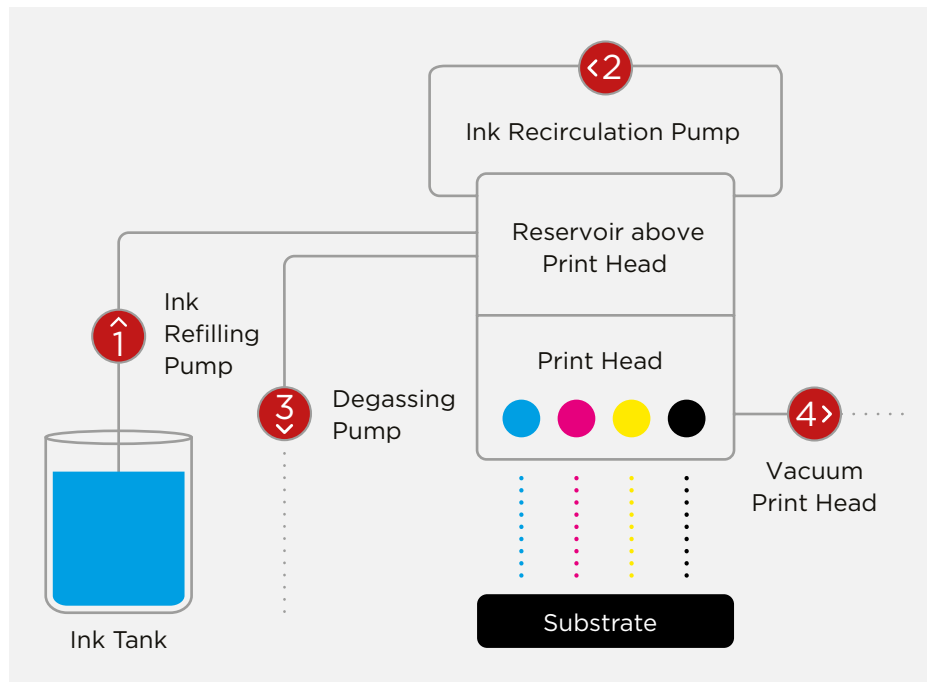
DoD Fluidic System

LIQUID PUMPS

- 1 **Ink refilling:** Ink is transferred from the ink tank to a reservoir above the print head
- 2 **Ink recirculation:** Ink is circulated to prevent settlement of particles and maintain a constant ink flow over the print head

GAS PUMPS

- 3 **Degassing:** A vacuum is applied above agitated ink to minimize bubbles
- 4 **Vacuum above print head:** A vacuum is applied to the print head to prevent ink dripping from nozzles when not printing



GDT 6410 / 6420 Liquid Diaphragm Pump

Recommended applications

- 1 **Ink refilling**
- 2 **Ink recirculation**

Description

- Liquid diaphragm pump for smooth, continuous transfer of liquids
- Free flow rate: 600 ml/min (per head)
- Pressure: continuous pressure up to 1 bar
- Suction height: up to 3 mWg

Benefits

- ✓ Smooth, continuous liquid flow with minimized pulses
- ✓ Bubble-free transfer of media
- ✓ Excellent reliability and durability even with corrosive and abrasive media
- ✓ Flexible design for customized solutions
- ✓ Reliable transfer of air/liquid mixture



GDT 1410 / 1420 Gas Diaphragm Pump

Recommended applications

- ③ Degassing
- ④ Vacuum / Anti-siphon

Description

- Gas diaphragm pump for efficient operation with low power consumption
- Free flow rate up to 11 L/min
- Intermittent pressure up to 1.9 bar
- Intermittent vacuum up to 75%

Benefits

- ✓ Compact design with good performance to size ratio
- ✓ Smooth and balanced operation
- ✓ Pump controllability
- ✓ Configurable design for customized solutions



GDT 1610 / 1620 Gas Diaphragm Pump

Recommended applications

- ③ Degassing
- ④ Vacuum / Anti-siphon

Description

- Gas diaphragm pump for high end vacuum and performance stability
- Free flow rate up to 16 L/min
- Intermittent pressure up to 2 bar
- Intermittent vacuum up to 90%

Benefits

- ✓ Low sound and vibration over performance range
- ✓ High evacuation speed
- ✓ Performance reliability over lifetime
- ✓ Configurable design for customized solutions



GENERAL CONTACT

Gardner Denver Thomas GmbH

Livry-Gargan-Str. 10
82256 Fürstenfeldbruck
Germany

T +49 8141 2280 0
F +49 8141 8892136
thomas.de@gardnerdenver.com

Gardner Denver Hong Kong, Limited

Unit 1317-1318 Delta House
3 On Yiu Street, Siu Lek Yuen
Shatin, New Territories
Hong Kong

T +852 2690 3502
F +852 2792 4598
thomas.hk@gardnerdenver.com

Gardner Denver Thomas, Inc.

1419 Illinois Avenue
Sheboygan, WI 53081
USA

T +1 920 457 4891
F +1 920 451 4276
td.usa@gardnerdenver.com

www.trythomaspumps.com

www.gd-thomas.com

www.tricontinent.com

www.welchvacuum.com