



# E-Flo<sup>®</sup> iQ

Single Component Metering and Dispensing System for Urethane



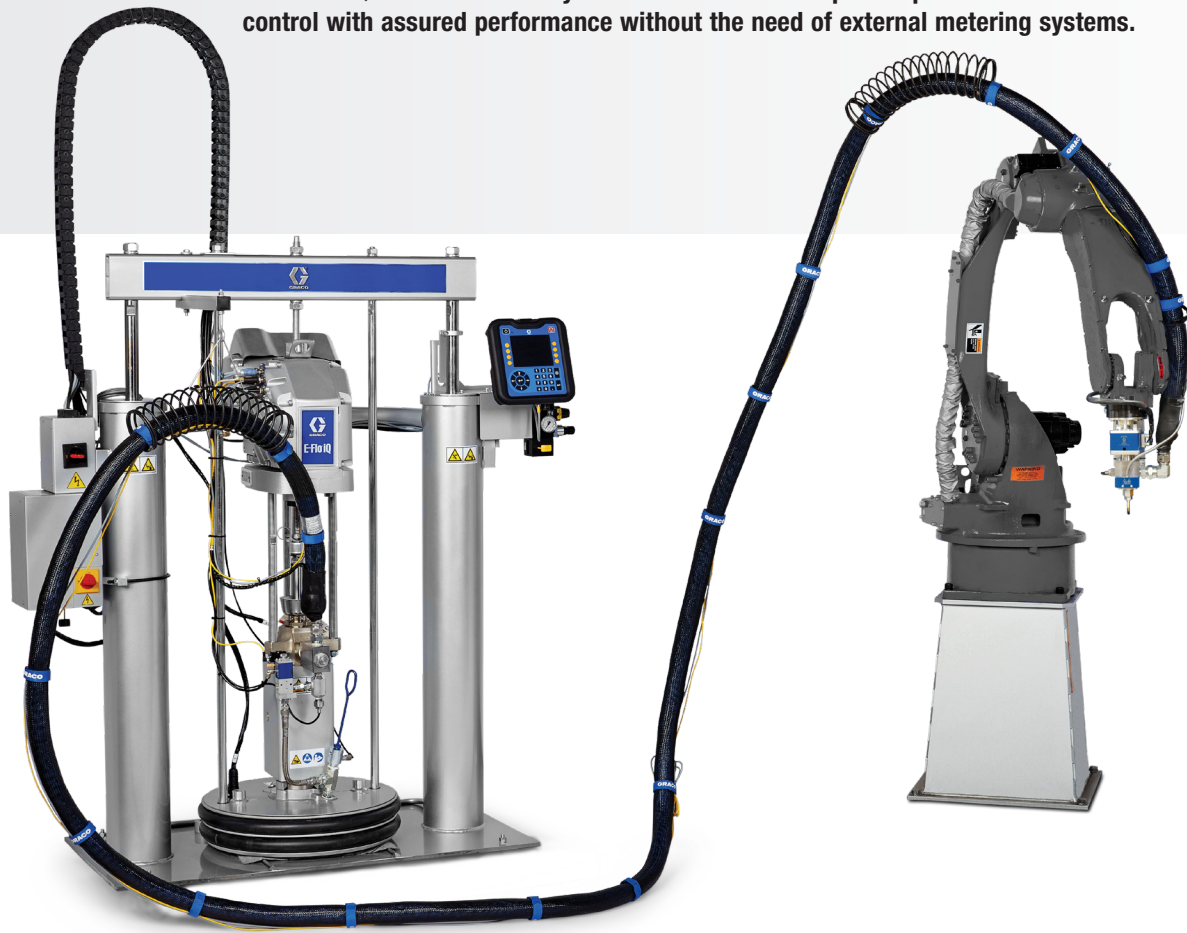
A new level of intelligence, control & performance

- Low cost of ownership
- Consistent control and accurate performance
- Simple system design and easy to integrate

PROVEN QUALITY. LEADING TECHNOLOGY.

# A new level of intelligence, control & performance

The E-Flo iQ is a single component tank-to-tip solution that provides your automatic applications with an intelligent metering system. With its electric servo-driven motor, the E-Flo iQ will meter directly from the drum and keeps an optimal and continuous flow control with assured performance without the need of external metering systems.



## ▶ Lower your cost of ownership

Metering directly from the drum reduces the number of system components and lets you eliminate external metering systems all together. With the simple setup of electric servo-driven pump, hose and valve, you will realize an immediate impact to your total cost of ownership.

### Lower sound levels

With current delivery systems, the sound levels often go well above 80 dBa. Because the E-Flo iQ is using an electric servo-driven motor, the sound level is often less than 70 dBa, making your working environment quieter.

### Lower payloads for your robot

With only a hose and valve mounted on the robot you are able to select a smaller, less expensive robot with a smaller payload capacity.

## Realize increased uptime at installation

- **Easy installations:** You will start realizing the increased uptime of the installation. With the simplicity of E-Flo iQ, installations are done quickly and with ease.
- **Low maintenance:** By using parts that have been proven in industries to be long lasting and of high quality, maintenance needs are extremely low. Also with the easy to access and program diagnostics screens, you will be able to analyze the total work of the pump and determine preventive maintenance.
- **Continuous dispensing without reloading**

## Applications

Glass bonding for automotive, agriculture, transportation and other heavy equipment.

- Windshield
- Back Glass
- Quarter Glass
- Sun Roofs
- Cabin Glass
- Cabin Roofs

# Increase your overall equipment effectiveness

## ► Consistent control of the flow rate with assured performance

Having accurate dispensing from start to finish and during the complete dispensing is not an easy task. You have to be able to control the flow and pressure, take into consideration the speed of the robot and be able to handle a wide range of materials for heated applications.



### Controlling and dispensing at accurate flow rates

The core of Meter from Drum Technology™ is the electric servo-driven motor. It is always aware of the position of the piston pump and its velocity, thus allowing the flow rate to be controlled and maintained at all times. Pressure sensors are placed at key locations to monitor and make sure the pressure is consistent from tank to tip.

### Precise and Accurate Rotating Dispense Valve

The Graco Axial Dispense Valve is a lightweight, high flow, high pressure applicator designed for precision robotic application of urethanes. Designed with swivel functionality, the valve can rotate independently of the cables and hoses to prevent stress on the robot and the hoses for precise and consistent bead application.



► **An easy to use control module with simple integration options**



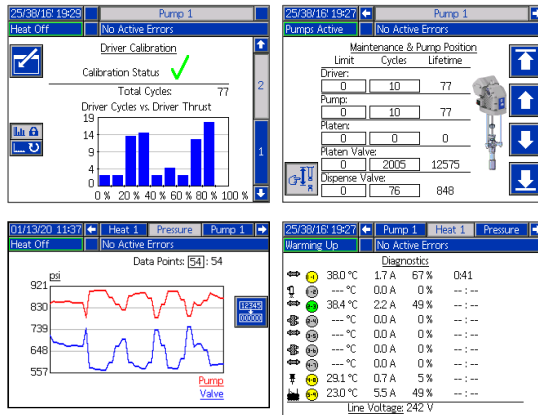
**An easy to use control module**

With the Advanced Display Module (ADM) on the E-Flo iQ, setting up and programming a metering system has never been easier.

It's intuitive screens make setting up of a bead profile quick and easy and lets you save up to 16 different dispense styles.

**Simple diagnostics**

The ADM also incorporates simple diagnostic screens which allow you to quickly check all the process variables and define predictive maintenance parameters.



**Integration with the PLC**

The communication gateway module (CGM) has integrated mapping of all of the programming data. Simply connect the CGM to the PLC for complete integration. Currently available protocols include EtherNet I/P, PROFINET, DeviceNet, or PROFIBUS.

By using the CGM you will be able to program an unlimited number of dispensing styles.

# Proven components

## Heating

The system will have a heat control module to handle adhesives up to 158°F (70°C). Next to the pump and platen heat zones, there are 6 heat zones for single systems and 12 for tandem systems.

## Electric servo-driven motor

A quiet electric motor that accurately controls the system flow rate.

## Display module

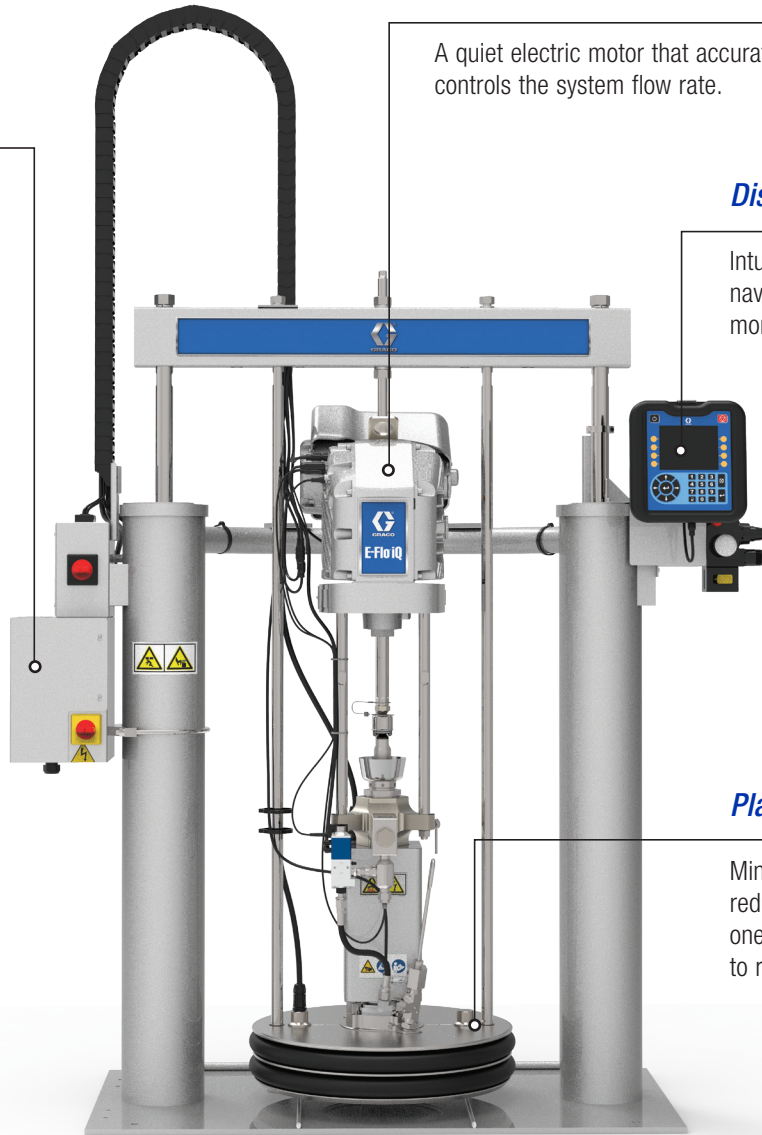
Intuitive, easy-to-use screen navigation provides simple setup, monitoring and diagnostics.

## Communication gateway module

The communication gateway module allows complete integration over EtherNet/IP, PROFINET, PROFIBUS, and DeviceNet or simple integration over discrete I/O.

## Platen design

Minimizes leftover material and reduces waste. Long-lasting, one-piece platen seals are easy to replace.



## Hoses

Graco hoses maintain the material temperature and improve material integrity. For heated systems, the hoses are insulated for an accurate and uniform material temperature.



## Axial Rotating Dispense Valve

Designed for the robotic application of urethane sealants for glass bonding.

# Technical information

## E-Flo iQ Metering and Dispensing System

	US	Metric
Maximum fluid operating temperature	158°F	70°C
Maximum working pressure	4000 psi	28 MPa, 276 bar
Maximum driver cycle rate	25 cycles per minute	
Air inlet size <i>(supply system)</i>	3/4 npt (f)	
Ambient operating temperature range <i>(supply system)</i>	32-120°F	0-49°C
Flow rate	10 cc/min - 2000 cc/ min (max. flow rate is based on Urethane viscosities dispense through the Axial Valve)	
Gateway	EtherNet/IP, DeviceNet, PROFINET, PROFIBUS	

## Electrical requirements

Ambient system electrical ratings	200-240 VAC, 1 phase, 50/60 Hz, 20 A
	200-240 VAC, 1 phase, 50/60 Hz, 20 A
Heated system electrical ratings	200-240 VAC, 3 phase (Δ), 50/60 Hz, 38 A
	380-420 VAC, 3 phase (Y), 50/60 Hz, 38 A

## Fluid outlet size

Check-Mate 200	1" npt (f)
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## Maximum air input pressure (supply system)

D200s - 6.5 in. dual post, 200 L (55 gal.)	125 psi	9 bar, 0.9 MPa
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## Axial Rotating Dispense Valve

	US	Metric
Maximum fluid working pressure	4000 psi	276 bar, 28 MPa
Maximum cylinder air pressure	120 psi	8.0 bar, 0.8 MPa
Maximum fluid operating temperature	158°F	70°C

## Inlet/Outlet Sizes

Air inlet size	1/8 in. npt(f) (Remote solenoid options only)
Air exhaust port size	1/8 in. npt (f)
Fluid inlet size	1/4 in. npt (f)

## Weight

Weight: 10.6 lb (4.8 kg)
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# Ordering information

## Selection of the E-Flo iQ system for Urethane

The E-Flo iQ System provides the flexibility to configure a system to meet your specific needs. This includes offering multiple combinations of supply systems, Axial dispensing valves, hoses and accessories.

Part Number	Configuration	Pump	RAM	Material Container Volume (gal)	Material Container	Hoses
<b>26B545</b>	Single	Check-Mate 200cc	D200s	55	200	10 ft hose
<b>26B546</b>	Single	Check-Mate 200cc	D200s	55	200	15 ft hose
<b>26B547</b>	Single	Check-Mate 200cc	D200s	55	200	20 ft hose
<b>26B548</b>	Single	Check-Mate 200cc	D200s	55	200	10 ft hose, 10 ft hose (WIP)
<b>26B549</b>	Single	Check-Mate 200cc	D200s	55	200	15 ft hose, 10 ft hose (WIP)
<b>26B550</b>	Single	Check-Mate 200cc	D200s	55	200	20 ft hose, 10 ft hose (WIP)
<b>26B551</b>	Single	Check-Mate 200cc	D200s	55	200	15 ft hose, 15 ft hose (WIP)
<b>26B552</b>	Tandem	Check-Mate 200cc	D200s	55	200	20 ft hose, 15 ft hose (WIP)
<b>26B553</b>	Tandem	Check-Mate 200cc	D200s	55	200	20 ft hose, 20 ft hose (WIP)
<b>26B554</b>	Tandem	Check-Mate 200cc	D200s	55	200	Two 10 ft hoses, 10 ft hose (WIP)
<b>26B555</b>	Tandem	Check-Mate 200cc	D200s	55	200	Two 10 ft hoses, 15 ft hose (WIP)
<b>26B556</b>	Tandem	Check-Mate 200cc	D200s	55	200	Two 10 ft hoses, 20 ft hose (WIP)
<b>26B557</b>	Tandem	Check-Mate 200cc	D200s	55	200	Two 15 ft hoses, 10 ft hose (WIP)
<b>26B558</b>	Tandem	Check-Mate 200cc	D200s	55	200	Two 20 ft hoses, 10 ft hose (WIP)
<b>26B559</b>	Tandem	Check-Mate 200cc	D200s	55	200	Two 20 ft hoses, 15 ft hose (WIP)
<b>26B560</b>	Tandem	Check-Mate 200cc	D200s	55	200	Two 20 ft hoses, 20 ft hose (WIP)



## 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 Distribution Center  
Graco Distribution BV  
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 9468 8500  
Fax: 61 3 9468 8599

#### CHINA

Graco Fluid Equipment  
(Shanghai) CO., LTD  
Building 7, No. 1-2, Wenshui  
Road 299, Jing'an District,  
Shanghai 200436  
The People's Republic of China  
Tel: 86 21 6495 0088  
Fax: 86 21 6495 0077

### INDIA

Graco India Pvt Ltd.  
Plot No 295, Udyog Vihar Phase-IV  
Guragram, Haryana  
India 122015  
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.  
38, Samsung 1-ro 1-gil  
Hwaseong-si, Gyeonggi-do, 18449  
Republic of Korea  
Tel: 82 31 8015 0961  
Fax: 82 31 613 9801

## SALES/ DISTRIBUTION/ SERVICE

Call today for product information or to request a demonstration.

**800-746-1334** or visit us at [www.graco.com](http://www.graco.com).

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