

# **PGM Metering System**

**Precision Gear Metering Dispense System** for Sealants and Adhesives



# Provides precise metering and ultimate control for smooth, consistent bead and ribbon dispensing

- Provides high flow rates with high-viscosity hot melt materials
- Offers precise starts and stops
- Touch-screen controls are easy to use, easy to integrate

## **Graco PGM Metering System**

Boost productivity with superior bead control and high flow rates

### **PGM**

### The rules have changed

The Graco PGM Metering System™ provides precise metering and ultimate control for delivering smooth, consistent bead dispense. Precision dispense combined with high flow rates — even with high viscosity materials — means you can dramatically improve production rates and ROI within your operation.

#### **Bead control saves material costs**

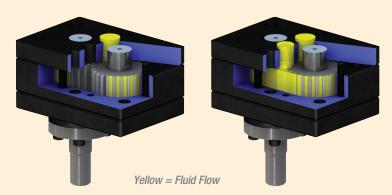
Gear meters are used to control bead dispense where application control is most critical. The PGM offers precise starting and stopping, minimizing "stringers" and "snakeheads." Precision dispense means less wasted material and savings on material costs. It also means less scrap and fewer wasted parts.

## Machine-mountable design assures precise dispense control

The PGM can be mounted at the point of dispense for an extremely accurate dispense.

#### **High flow rates improve your production capacity**

With the higher flow rates of the Graco PGM, you can achieve greater productivity in your manufacturing process.



### **Gear metering technology**

#### **Materials**

- Ambient, warm melt and hot melt materials to 400°F (204°C)
- · Low to high-viscosity materials
- Unlimited volume

#### **Applications**

#### Solar panel manufacturing:

- Polyisobutylene (PIB) perimeter seal
- Dessicated butyl
- Silicone secondary seal

#### **Automotive manufacturing:**

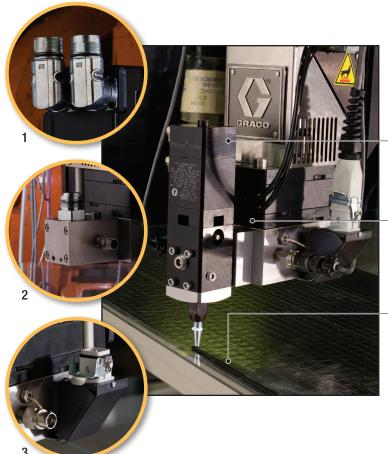
- Urethane windshield sealants
- Robotized front and rear windows sealing line
- Headliner assembly

# Window and door manufacturing:

Insulated glass

#### **General assembly:**

- Any process requiring a precise bead or ribbon profile
- Appliances
- Filters
- Electronics
- Small Engine Gaskets



Compact, fixed or machinemountable design

Positive displacement gear pump technology provides superior, consistent bead and ribbon profile quality

Delivers clean starts and stops for less material waste

- 1. Communication from the command center provides precise control for the servo drive.
- 2. Material enters the manifold vertically, allowing the gear head to rotate during a dispense
- 3. Robust power and sensor connections create a reliable system

# **Operator-friendly touch-screen controls**

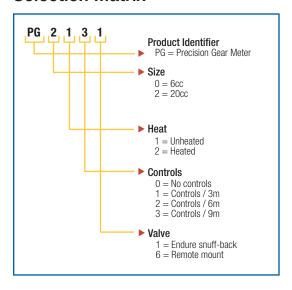
- Easy-to-use controls makes training easier
- Integrated self-diagnostics and serviceable design make service quick and easy
- Easy to integrate the system into your plant
- Controls and monitors dispense



# **Technical Specifications & Ordering Information**

Everything you need to make an informed decision

#### **Selection Matrix**



#### **Remote Dispense Valves**

243694 Heated Dispense Valve244951 Endure™ Valve, Heated,

1/2 in npt male outlet

244909 Endure Valve, Heated

#### **Fixed Dispense Valves**

244907 Endure Valve

#### **Parts and Accessories**

24D824 Automation I/O Cable

24E654 Ribbon Nozzle Kit, 10 x 1.5 mm

24E655 Bead Nozzle Kit, 3 mm dia

24E575 Dynamic Air Regulator for TOF

24E607 Gear Pump Seals, 6 cc

24E619 Gear Pump Seals, 20 cc

**24E677** O-ring Kit, 6 cc

**24E626** O-ring Kit, 20 cc

24E678 Heated Nest, Pilot

24E679 Heated nest, Ribbon or Bead

### **Technical Specifications**

| Flow rates*                        |                                    |
|------------------------------------|------------------------------------|
| Max. (6 cc/rev Pump)               | . 480 cc/min                       |
| Max. (20 cc/rev Pump)              | . 1600 cc/min                      |
| Max. fluid working inlet pressure  | . 1500 psi (103.42 bar, 10.34 MPa) |
| Max. fluid working outlet pressure | . 2500 psi (172.36 bar, 17.24 MPa) |
| Air supply pressure range          | . 60-100 psi (7 bar, 0.7 Mpa,)     |
|                                    | filtration required                |
| Fluid filtration                   | . 200 mesh minimum                 |
| Weight                             |                                    |
| 6 cc/rev Pump                      | . 30 lb (13.61 kg)                 |
| 20 cc/rev Pump                     | . 60 lb (27.22 kg)                 |
| Fluid viscosity range*             | . 1000 - 1,000,000 cps             |
| Wetted parts                       |                                    |
| Power requirements                 | Full load 18.5A, fuse rating 21A   |
| Power supply voltage range         | . 240VAC, 50-60 Hz, 1-ph           |
| Operating temperature range        |                                    |
| Heated Pump                        | . 40 to 400°F (4 to 204°C)         |
| Ambient Pump                       | . 40 to 120°F (4 to 49°C)          |
| Dimensions                         |                                    |
| 6 cc/rev Pump                      | . 19.75 H x 9.38 W x 6.6 D in      |
|                                    | (50.17 x 23.83 x 16.76 cm)         |
| 20 cc/rev Pump                     | . 21.75 H x 9.5 W x 8.9 D in       |
|                                    | (55.25 x 24.13 x 22.6 cm)          |
|                                    |                                    |

<sup>\*</sup> Flow rates and viscosities are general estimates.

| HOSE DIAMETER            |       |                    |                     |                        |                                   |                     |                      |  |  |
|--------------------------|-------|--------------------|---------------------|------------------------|-----------------------------------|---------------------|----------------------|--|--|
| Hot Melt                 |       |                    |                     |                        | Ambient                           |                     |                      |  |  |
|                          |       | - 8<br>3/4"-16 JIC | - 10<br>7/8"-14 JIC | - 12<br>1-1/16"-12 JIC | - 16<br>1-5/16"-12 JIC            | 3/8"                | 1/2"                 |  |  |
| Hose Length              | 6 ft  | None               | 19M404<br>17J654◆   | None                   | 19M416<br>17J666*                 | 109163              | 626723<br>1/2"x 5 ft |  |  |
|                          | 10 ft | 19M402<br>17J652◆  | 19M405<br>17J655*   | 19M412<br>17J662◆      | 19M417<br>17J667*                 | None                | 215441               |  |  |
|                          | 15 ft | None               | None                | None                   | None                              | 109165/<br>685602*  | 511381*              |  |  |
| FITTINGS                 |       |                    |                     |                        |                                   |                     |                      |  |  |
| PGM Inlet<br>(-16 SAE)   |       | None               | None                | 124238<br>124235 (90°) | 124239<br>124243†<br>124236 (90°) | None                | None                 |  |  |
| PGM Outlet<br>(3/4" npt) |       | 124286             | C20595              | 15M863                 | 107127                            | 124290 <sup>†</sup> | 124289 <sup>†</sup>  |  |  |
| Dispense<br>Valve Inlet  |       | 124287             | C20768              | 107052                 | 124288                            | 158256 <sup>†</sup> | 190451 <sup>†</sup>  |  |  |

<sup>\*</sup> Indicates PTFE hose, all others Buna-N.

### **Contact us today!**

To receive product information or talk with a Graco representative, call 800-746-1334 or visit us online at www.graco.com.



<sup>†</sup> Indicates swivel

<sup>◆</sup> Therm-0-Flow part number 98xxxx models