# PRECISION SHOT METER (PSM) AND DISPENSE SYSTEMS



For One Component Sealants and Adhesives



### **Precision Shot Meter (PSM)**

#### For highly accurate automated metering and dispense of one component material

An innovative fluid path and robust construction make this precision shot meter (PSM) ideal for automatically applying one component epoxies, silicones, acrylics, urethanes, polysulfides and thermal interface materials (TIMs).

**High accuracy:** Servo motor control and high precision meter ensure +/- 1 percent shot repeatability.

**Compact structure and lightweight design:** Modular system fits into almost any automated assembly line and does not overload robot arms.

**Wide shot size range:** Configurations with maximum shot sizes of 25 ccs, 50 ccs or 100 ccs fit multiple applications.

**Low maintenance:** Patented first-in-first-out (FIFO) fluid path keeps materials from blocking and curing inside the supply pump.

**Dependable outlet valve:** Available in tip seal, snuff back, or ball seat models, the Graco iQ Dispense Valve delivers long-lasting performance.





PSM-25



**PSM-50** 



**Wear Resistant and Warm Melt Options** 

If your manufacturing requirements involve abrasive or warm melt material, consider these PSM options:

Ultra wear resistant ceramic coating withstands abrasive and viscous material, reducing maintenance.

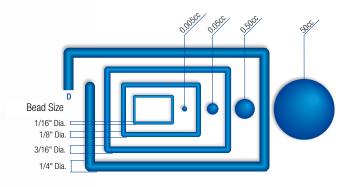
Heating function brings material temperature up to 70°C (158°F).

# INCREASE PRODUCTIVITY WITH HIGH ACCURACY AND EFFICIENCY

#### High Repeatability of Each Bead, Dot and Pattern

Servo drive design allows for accurate and highly repeatable dispense.

On-demand flow control synchronizes dispense rates with automation speeds



# **Engineered for Low Maintenance and High Efficiency**

Patented first-in-first-out (FIFO) fluid path keeps material from settling or curing inside the metering tube. This prevents clogging

Durable construction and fluid path geometry resist wear from abrasive materials and extend service life.

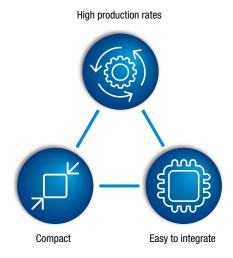


First-in-first-out (FIFO) fluid path

# **Compact Design and Easy Integration Lead to High Production Rates**

Small size and low mass mean installation flexibility for standalone benchtop and automated applications.

Simple communication protocols provide seamless integration with robots, automated work cells, and data tracking systems. Multiple system configurations level up production by improving material transfer and dispense



# **Applications, Industries and Materials**

### **Applications:**



#### **Industries:**



**Automotive Manufacturing** 



**Electronics** 



Transportation



**Automotive Electronics** 



**Telecommunications** 



Whitegoods/appliances



General industry

#### **Materials:**

- Epoxies
- Polysulfides
- Silicones
- Thermal Interface Materials
- Acrylics
- Polyurethanes

### Controller



### **Easy Integration for Automation**

Printed circuit board (PCB) controller fits efficiently into automated assembly lines.

Large screen for easy operation Wall mount for small spaces Various dispensing modes for changing needs Communication protocols integrate with robots, automated work cells, and data tracking systems.

All PSM systems come equipped with I/O (input/output) communication.

For PROFINET and EtherNet/IP integration, use These communication gateway module (CGM) kits allow further integration:

- PROFINET CGM, 2005273
- EtherNet/IP CGM, 2000362



# **Technical Specifications**







Model	PSM-25	PSM-50	PSM-100			
Travel	38 mm	38 mm	60 mm			
Shot Size Range	0.01 - 25 cc	0.2 - 50 cc	0.5 - 100 cc			
Maximum Flow Rate	10 cc/s	18 cc/s	20 cc/s			
Dimensions (L x W x H) (without mixing nozzle)	590x156x142 mm	647x162x155 mm	737x162x155 mm			
Weight	11 Kg / 24 lbs	13 Kg / 29 lbs	16 Kg / 35 lbs			
Maximum Operating Temperature	70°C (158 °F)					
Maximum Air Humidity		20 - 80%				
Maximum Working Fluid Pressure	1200 psi, 8.3 Mpa, 82.7 bar	3000 psi, 20.7 Mpa, 206.8 bar	3000 psi, 20.7 Mpa, 206.8 bar			
Maximum Air Pressure	100 psi, 0.7 Mpa, 7 bar					
Power Supply	200-240 Vac, 50 Hz / 60 Hz, 10 A					
Air inlet size	1/4 in. or 6 mm					
Fluid Inlet	1/4 npt(f)					
Fluid Outlet	1/4 npt (f) and 3/4-16 unf (m)					
Fluid Viscosity Range	10,000 -1,000,000 cps					

# **Ordering Information**

### **Precision Shot Meter Systems**

Part No.	Description	Part No.	Description
25S141	PSM System, Supply Pump, Feed, Direct, SST, 25 cc, I/O, Snuff Back	2000831	PSM System, Supply Pump Feed, Direct, CER, 50cc, I/O, Tip Seal
25S148	PSM System, Supply Pump Feed, Direct, CER, 25 cc, I/O, Snuff Back	2000832	PSM System, Supply Pump Feed, Direct, SST, 100cc, I/O, Tip Seal
25\$142	PSM System, Supply Pump Feed, Direct, SST, 50 cc, I/O, Snuff Back	2000833	PSM System, Supply Pump Feed, Direct, CER, 100cc, I/O, Tip Seal
25S167	PSM System, Supply Pump Feed, Direct, CER, 50 cc, I/O, Snuff Back	2001633	PSM System, Supply Pump Feed, Direct, SST, 25cc, I/O, Ball Seat
25S143	PSM System, Supply Pump Feed, Direct, SST, 100 cc, I/O, Snuff Back	2001634	PSM System, Supply Pump Feed, Direct, CER, 25cc, I/O, Ball Seat
25S170	PSM System, Supply Pump Feed, Direct, CER, 100 cc, I/O, Snuff Back	2001635	PSM System, Supply Pump Feed, Direct, SST, 50cc, I/O, Ball Seat
2000828	PSM System, Supply Pump Feed, Direct, SST, 25cc, I/O, Tip Seal	2001636	PSM System, Supply Pump Feed, Direct, CER, 50cc, I/O, Ball Seat
2000829	PSM System, Supply Pump Feed, Direct, CER, 25cc, I/O, Tip Seal	2001637	PSM System, Supply Pump Feed, Direct, SST, 100cc, I/O, Ball Seat
2000830	PSM System, Supply Pump Feed, Direct, SST, 50cc, I/O, Tip Seal	2001638	PSM System, Supply Pump Feed, Direct, CER, 100cc, I/O, Ball Seat

### **Remote Hose Kits**

Part No.	Description	Part No.	Description
2000842	HOSE, PSM, JIC fitting, 3/32X60	2000852	HOSE, PSM, JIC fitting, 3/8X36
2000843	HOSE, PSM, JIC fitting, 1/8X60	2000853	HOSE, PSM, JIC fitting, ,3/8X48
2000844	HOSE, PSM, JIC fitting, 3/16X36	2000854	HOSE, PSM, JIC fitting, 3/8X60
2000845	HOSE, PSM, JIC fitting, 3/16X48	2000855	HOSE, PSM, JIC fitting, 3/8X72
2000847	HOSE, PSM, JIC fitting, 3/16X72	2000856	HOSE, PSM, JIC fitting, 1/2X36
2000848	HOSE, PSM, JIC fitting, 1/4X36	2000857	HOSE, PSM, JIC fitting, 1/2X48
2000849	HOSE, PSM, JIC fitting, 1/4X48	2000858	HOSE, PSM, JIC fitting, 1/2X60
2000850	HOSE, PSM, JIC fitting, 1/4X60	2000859	HOSE, PSM, JIC fitting, 1/2X72
2000851	HOSE, PSM, JIC fitting, 1/4X72	2000712	HOSE, PSM, ORFS fitting, 3/8X72



### **OUR BRAND PROMISE TO YOU**

Since 1926, innovation, quality and A+ Service have been at the centre of Graco.

### **Experience Innovation**

Our focus on innovation results in products and equipment that lead the industry with technologically-advanced features, pioneering design, high performance and unparalleled reliability. In short, innovation is how you get better products!

### **Building Quality**

You're investing in high-quality products built to last for years of reliable service. Moreover, we partner with our customers to better understand how you're deploying our products in the field, then use your experiences to improve performance and durability.



### A+ service, every time

You'll see A+ Service in action when you contact any of our support services options no matter where you are in the world. We'll listen to your situation and work methodically to resolve it as quickly as we can. We are guided by a mindset of integrity and a customer service view centred on collaboration and relationships, not transactions.



We're here to answer questions and help address your needs:

www.graco.com/contact

Graco is certified ISO 9001.