

# Gamma/ L Series

Smart and versatile solenoid metering pump



The **ProMinent® gamma/ L** is a microprocessor-based diaphragm solenoid metering pump capable of flows from **0.16 to 8.4 gph (0.59 to 32 l/h)** and pressures up to **290 psi (20 bar)**. The calibrated flow is displayed in gph or L/h. The large illuminated LCD display ensures that all displayed variables are easy to read.

## Features & Benefits

- Microprocessor based technology for flexible control: Manual stroke length and frequency, Batch, Remote on/off, Contact Pulse, Analog
- Certified to NSF/ANSI 61 (acrylic or PVDF liquid ends)
- 14-Day programmable timer
- Integrated Auto-degassing liquid ends ideal for off-gassing chemicals such as bleach
- Integral bleed valve eliminates priming issues
- Liquid end materials covering all chemicals
- Simple calibration allows pump to display flow rate and totalized flow
- Optional flow monitor for feed verification
- Universally compatible PVDF liquid ends
- Analog output of feed rate eliminates needs to check on the pump

- New Protimer software for programming timer from PC
- Access Codes to prevent unauthorized adjustment
- Capable of handling up to 3000 cps of viscous media such as polymers

## Applications

- Bleach and other off-gassing fluid applications
- Water and wastewater treatment
- Highly automated processes in nearly all industries
- Cooling tower and boiler water treatment

ProMinent®



# Gamma/ L Series

## Technical data

| Capacity Data                            |                                       |       |      |        |           |                                           |        |      |        |           |                         |       |                    |                                            |                                             |           |
|------------------------------------------|---------------------------------------|-------|------|--------|-----------|-------------------------------------------|--------|------|--------|-----------|-------------------------|-------|--------------------|--------------------------------------------|---------------------------------------------|-----------|
| Pump Version                             | Capacity at Maximum Backpressure U.S. |       |      |        |           | Capacity at 1/2 Maximum Backpressure U.S. |        |      |        |           | Pre-Primed Suction Lift |       | Max. Stroking Rate | Tubing Connectors <sup>2</sup> O.D. x I.D. | Shipping Weight (higher weights are for SS) |           |
|                                          | psig                                  | (bar) | GPH  | (l/h)  | ml/stroke | psig                                      | (bar)  | GPH  | (l/h)  | ml/stroke | ft                      | (m)   |                    |                                            | spm                                         | inches    |
| gamma/ L with standard liquid ends       |                                       |       |      |        |           |                                           |        |      |        |           |                         |       |                    |                                            |                                             |           |
| 1000                                     | 145                                   | (10)  | 0.19 | (0.74) | 0.07      | 73                                        | (5)    | 0.21 | (0.82) | 0.08      | 19.6                    | (6)   | 180                | 1/4 x 3/16                                 | 7.5-8.6                                     | (3.4-3.9) |
| 2001 <sup>3</sup>                        | 290                                   | (20)  | 0.26 | (0.98) | 0.1       | 145                                       | (10)   | 0.37 | (1.4)  | 0.13      | 19.6                    | (6)   | 180                | 1/4 x 3/16                                 | 6.4-7.9                                     | (2.9-3.6) |
| 1601                                     | 232                                   | (16)  | 0.29 | (1.1)  | 0.1       | 126                                       | (8.75) | 0.37 | (1.4)  | 0.13      | 19.6                    | (6)   | 180                | 1/4 x 3/16                                 | 7.5-8.6                                     | (3.4-3.9) |
| 2002 <sup>3</sup>                        | 290                                   | (20)  | 0.45 | (1.7)  | 0.19      | 145                                       | (10)   | 0.66 | (2.5)  | 0.24      | 19.6                    | (6)   | 180                | 1/4 x 3/16                                 | 6.4-7.9                                     | (2.9-3.6) |
| 1602                                     | 232                                   | (16)  | 0.55 | (2.1)  | 0.19      | 126                                       | (8.75) | 0.66 | (2.5)  | 0.24      | 19.6                    | (6)   | 180                | 1/4 x 3/16                                 | 7.5-8.8                                     | (3.4-4.0) |
| 1005                                     | 145                                   | (10)  | 1.1  | (4.4)  | 0.41      | 73                                        | (5)    | 1.32 | (5)    | 0.46      | 19.6                    | (6)   | 180                | 1/2 x 3/8                                  | 7.7-9.0                                     | (3.5-4.1) |
| 0708                                     | 101                                   | (7)   | 1.9  | (7.1)  | 0.66      | 50.5                                      | (3.50) | 2.22 | (8.4)  | 0.78      | 19.6                    | (6)   | 180                | 1/2 x 3/8                                  | 7.7-11.0                                    | (3.5-5.0) |
| 0413                                     | 58                                    | (4)   | 3.2  | (12.3) | 1.14      | 29                                        | (2)    | 3.75 | (14.2) | 1.31      | 9.8                     | (3)   | 180                | 1/2 x 3/8                                  | 7.7-11.0                                    | (3.5-5.0) |
| 0220                                     | 29                                    | (2)   | 5    | (19.0) | 1.76      | 14.5                                      | (1)    | 5.52 | (20.9) | 1.94      | 6.5                     | (2)   | 180                | 1/2 x 3/8                                  | 7.7-11.0                                    | (3.5-5.0) |
| 1605                                     | 232                                   | (16)  | 1.1  | (4.1)  | 0.38      | 126                                       | (8.75) | 1.29 | (4.9)  | 0.45      | 19.6                    | (6)   | 180                | 1/2 x 3/8                                  | 9.3-10.8                                    | (4.2-4.9) |
| 1008                                     | 145                                   | (10)  | 1.8  | (6.8)  | 0.63      | 73                                        | (5)    | 2.19 | (8.3)  | 0.76      | 19.6                    | (6)   | 180                | 1/2 x 3/8                                  | 9.5-12.8                                    | (4.3-5.8) |
| 0713                                     | 101                                   | (7)   | 2.9  | (11.0) | 1.02      | 50.5                                      | (3.50) | 3.46 | (13.1) | 1.21      | 13.1                    | (4)   | 180                | 1/2 x 3/8                                  | 9.5-12.8                                    | (4.3-5.8) |
| 0420                                     | 58                                    | (4)   | 4.5  | (17.1) | 1.58      | 29                                        | (2)    | 5.04 | (19.1) | 1.77      | 9.8                     | (3)   | 180                | 1/2 x 3/8                                  | 9.5-12.8                                    | (4.3-5.8) |
| 2321 <sup>1</sup>                        | 29                                    | (2)   | 8.4  | (32.0) | 2.96      | 14.5                                      | (1)    | 9.56 | (36.2) | 3.35      | 6.5                     | (2)   | 180                | 1/2 x 3/8                                  | 11.2-14.6                                   | (5.1-6.6) |
| gamma/ L with auto-degassing liquid ends |                                       |       |      |        |           |                                           |        |      |        |           |                         |       |                    |                                            |                                             |           |
| 1601                                     | 232                                   | (16)  | 0.16 | (0.59) | 0.055     | 126                                       | (8.75) | 0.21 | (0.78) | 0.07      | 5.9                     | (1.8) | 180                | 1/4 x 3/16                                 | 7.7                                         | (3.5)     |
| 1602                                     | 232                                   | (16)  | 0.37 | (1.4)  | 0.13      | 126                                       | (8.75) | 0.45 | (1.7)  | 0.16      | 6.9                     | (2.1) | 180                | 1/4 x 3/16                                 | 7.7                                         | (3.5)     |
| 1005                                     | 145                                   | (10)  | 0.95 | (3.6)  | 0.33      | 73                                        | (5)    | 1.05 | (4)    | 0.37      | 8.8                     | (2.7) | 180                | 1/2 x 3/8                                  | 7.7                                         | (3.5)     |
| 0708                                     | 101                                   | (7)   | 1.74 | (6.6)  | 0.61      | 50.5                                      | (3.50) | 1.98 | (7.5)  | 0.69      | 6.5                     | (2)   | 180                | 1/2 x 3/8                                  | 7.7                                         | (3.5)     |
| 0413                                     | 58                                    | (4)   | 2.8  | (10.8) | 1         | 29                                        | (2)    | 3.3  | (12.6) | 1.17      | 6.5                     | (2)   | 180                | 1/2 x 3/8                                  | 7.9                                         | (3.6)     |
| 0220                                     | 29                                    | (2)   | 4.3  | (16.2) | 1.5       | 14.5                                      | (1)    | 4.7  | (18.0) | 1.67      | 6.5                     | (2)   | 180                | 1/2 x 3/8                                  | 7.9                                         | (3.6)     |
| 1605                                     | 232                                   | (16)  | 0.87 | (3.3)  | 0.31      | 126                                       | (8.75) | 1    | (3.8)  | 0.35      | 9.8                     | (3)   | 180                | 1/2 x 3/8                                  | 9.5                                         | (4.3)     |
| 1008                                     | 145                                   | (10)  | 1.66 | (6.3)  | 0.58      | 73                                        | (5)    | 1.98 | (7.5)  | 0.69      | 9.8                     | (3)   | 180                | 1/2 x 3/8                                  | 9.5                                         | (4.3)     |
| 0713                                     | 101                                   | (7)   | 2.77 | (10.5) | 0.97      | 50.5                                      | (3.50) | 3.2  | (12.3) | 1.14      | 8.2                     | (2.5) | 180                | 1/2 x 3/8                                  | 9.5                                         | (4.3)     |
| 0420                                     | 58                                    | (4)   | 4.12 | (15.6) | 1.44      | 29                                        | (2)    | 4.6  | (17.4) | 1.61      | 8.2                     | (2.5) | 180                | 1/2 x 3/8                                  | 9.5                                         | (4.3)     |

(Note: Above capacities and suction lift refer to pumps tested on water at 115 VAC, 60 Hz, and an ambient temperature of 70°F (20°C). Higher specific gravity fluids will reduce suction lift.

Capacities will be slightly reduced from published ratings if pumps are skid mounted.)

Higher viscosity fluids will reduce capacity. Liquid ends for highly viscous media have 10-20% less metering capacity and are not self-priming. Standard connectors are 1/2" MNPT or 5/8" hose barb. Positive suction is recommended.

<sup>1</sup> Not available with bleed valve.

<sup>2</sup> SS versions use 1/4" female threads except models 0220, 0420, and 0232 which use 3/8" female threads.

<sup>3</sup> Only available in SS and Acrylic liquid ends.

Universal control cable necessary for external Beta control.

| Liquid end materials in contact with media |                  |                            |         |         |
|--------------------------------------------|------------------|----------------------------|---------|---------|
|                                            | Pump head        | Suction/Pressure connector | O-rings | Balls   |
| PPE                                        | Polypropylene    | Polypropylene              | EPDM    | ceramic |
| PPB                                        | Polypropylene    | Polypropylene              | Viton®  | ceramic |
| NPE                                        | Acrylic          | PVC                        | EPDM    | ceramic |
| NPB                                        | Acrylic          | PVC                        | Viton®  | ceramic |
| PVT                                        | PVDF             | PVDF                       | PTFE    | ceramic |
| TTT                                        | PTFE with carbon | PTFE with carbon           | PTFE    | ceramic |
| SST                                        | stainless steel  | stainless steel            | PTFE    | ceramic |

Auto-degassing version available in PP and NP only. Supplied with Hastelloy C valve springs, PVDF valve core. Pump diaphragm with PTFE-coating. Note: Viton® is a registered trademark of DuPont Dow Elastomers.



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