

gamma/ X Series

ALL NEW

X-tremely clever!



The new gamma/ X is the first metering pump with predictive intelligence. Thanks to its controlled solenoid drive with sensor-free pressure measurement, it detects hydraulic faults even in the case of minimal deviations – immediately and optimally matching its output to the pressure conditions and properties of the medium while protecting the pump and piping systems from overload situations.

Features & Benefits

- Electronic stroke length adjustment
- Volume adjustment in gph
- Analog, Contact and Batch modes optional
- Integrated system pressure measurement
- Bus interfaces such as Profibus and CANbus
- Bluetooth technology available
- Improved visibility of LED-indicator lights
- Large illuminated display
- Analog output for stroke length and stroke rate transmission
- Removable base for quick and easy installation
- Auto compensates programmed feed rates during backpressure fluctuations
- As low as 1mL/hr continuous feed rate with regulated solenoid drive
- Turn down ratio up to 40,000:1
- Integrated pressure measurement and display
- Available diaphragm rupture indicator
- Integrated 7 day timer
- Detects Overpressure/ No Pressure (broken discharge line)
- Automatically sets optimal speed and stroke based on GPH settings
- Certified to NSF/ANSI 61 (acrylic and PVDF liquid ends only)

gamma/ X Series

Technical data

| Capacity Data | | | | | | | | | | | | |
|--|----------------------------------|-------|------|--------|-----------|-----------------------------------|--|--------------|-------|---|---------------------|------|
| Pump Version | Capacity at Maximum Backpressure | | | | | Max. Stroking Rate Strokes/min | Tubing Connectors O.D. x I.D. in | Suction Lift | | SS Liquid end connections FNPT in | Shipping Weight lbs | |
| | psig | (bar) | GPH* | (l/h) | ml/stroke | | | ft | (m) | | NP/PV | SS |
| gamma/ X with standard liquid ends | | | | | | | | | | | | |
| 1602 | 232 | (16) | 0.61 | (2.3) | 0.19 | 200 | 1/4 x 3/16 | 19.6 | (6) | 1/4 | 7.9 | 9 |
| 1604 | 232 | (16) | 0.95 | (3.6) | 0.30 | 200 | 1/4 x 3/16 | 19.6 | (6) | 1/4 | 7.9 | 9 |
| 0708 | 102 | (7) | 2.0 | (7.6) | 0.63 | 200 | 1/2 x 3/8 | 19.6 | (6) | 1/4 | 8.1 | 11 |
| 0414 | 58 | (4) | 3.56 | (13.5) | 1.17 | 200 | 1/2 x 3/8 | 19.6 | (6) | 1/4 | 8.1 | 11 |
| 0220 | 29 | (2) | 5.2 | (19.7) | 1.64 | 200 | 1/2 x 3/8 | 19.6 | (6) | 3/8 | 8.1 | 11 |
| 2504 | 363 | (25) | 1.0 | (3.8) | 0.32 | 200 | (8 x 4mm) | 19.6 | (6) | 1/4 | 10.8 | 12.1 |
| 1009 | 145 | (10) | 2.38 | (9.0) | 0.75 | 200 | 1/2 x 3/8 | 19.6 | (6) | 1/4 | 11.2 | 14.3 |
| 0715 | 102 | (7) | 3.83 | (14.5) | 1.21 | 200 | 1/2 x 3/8 | 9.8 | (3) | 1/4 | 11.2 | 14.3 |
| 0424 | 58 | (4) | 6.34 | (24) | 2.00 | 200 | 1/2 x 3/8 | 6.5 | (2) | 3/8 | 11.2 | 14.3 |
| 0245 | 29 | (2) | 11.9 | (45) | 3.70 | 200 | 1/2 x 3/8 | 6.5 | (2) | 3/8 | 11.5 | 15.4 |
| gamma/ X with auto-degassing liquid ends NPB9/ NPE9 | | | | | | | | | | | | |
| 1602 | 232 | (16) | 0.34 | (1.30) | 0.11 | 200 | 1/4 x 3/16 | 6.9 | (2.1) | - | 7.9 | - |
| 1604 | 232 | (16) | 0.63 | (2.40) | 0.21 | 200 | 1/4 x 3/16 | 8.9 | (2.7) | - | 7.9 | - |
| 0708 | 101 | (7) | 1.8 | (6.80) | 0.57 | 200 | 1/2 x 3/8 | 6.5 | (2) | - | 8.1 | - |
| 0414 | 58 | (4) | 3.17 | (12) | 1.00 | 200 | 1/2 x 3/8 | 6.5 | (2) | - | 8.1 | - |
| 0220 | 29 | (2) | 4.75 | (18) | 1.5 | 200 | 1/2 x 3/8 | 6.5 | (2) | - | 8.1 | - |
| 1009 | 145 | (10) | 2.11 | (8) | 0.67 | 200 | 1/2 x 3/8 | 9.8 | (3) | - | 11.2 | - |
| 0715 | 101 | (7) | 3.56 | (13.5) | 1.00 | 200 | 1/2 x 3/8 | 8.2 | (2.5) | - | 11.2 | - |
| 0424 | 58 | (4) | 5.28 | (20) | 1.67 | 200 | 1/2 x 3/8 | 8.2 | (2.5) | - | 11.2 | - |
| gamma/ X with auto-degassing liquid ends PVT7 | | | | | | | | | | | | |
| 1602 | 232 | (16) | 0.24 | (0.9) | 0.075 | 200 | 1/4 x 3/16 | 6 | (1.8) | - | 7.9 | - |
| 1604 | 232 | (16) | 0.41 | (1.55) | 0.13 | 200 | 1/4 x 3/16 | 6 | (1.8) | - | 7.9 | - |
| 0708 | 101 | (7) | 1.50 | (5.7) | 0.48 | 200 | 1/2 x 3/8 | 6 | (1.8) | - | 8.1 | - |
| 0414 | 58 | (4) | 3.17 | (12) | 1.00 | 200 | 1/2 x 3/8 | 6 | (1.8) | - | 8.1 | - |
| 0220 | 29 | (2) | 4.60 | (17.4) | 1.45 | 200 | 1/2 x 3/8 | 6 | (1.8) | - | 8.1 | - |
| 1009 | 145 | (10) | 1.58 | (6.0) | 0.50 | 200 | 1/2 x 3/8 | 6 | (1.8) | - | 11.2 | - |
| 0715 | 101 | (7) | 3.40 | (12.9) | 1.08 | 200 | 1/2 x 3/8 | 6 | (1.8) | - | 11.2 | - |
| 0424 | 58 | (4) | 5.07 | (19.2) | 1.60 | 200 | 1/2 x 3/8 | 6 | (1.8) | - | 11.2 | - |

gamma/ X metering pumps with high viscosity liquid ends (PVT 4) have a 10 – 20 % lower capacity rating and are not self-priming.

Positive suction is recommended and pumps supplied with 1/2" MNPT connections.

* The given performance data represents guaranteed minimum values, tested using water as the medium at room temperature.

All data refers to water at 68 °F.

| Liquid end materials in contact with media | | | | | |
|--|-----------------|-----------------------------|--------------|-------|---------|
| | Pump Head | Suction/ discharge valve | Ball seat | Seals | Balls |
| NPE | Clear acrylic | PVC | EPDM | EPDM | Ceramic |
| NPB | Clear acrylic | PVC | FKM | FKM | Ceramic |
| PVT | PVDF | PVDF | PVDF | PTFE | Ceramic |
| SST | Stainless Steel | Stainless Steel | Ceramic | PTFE | Ceramic |

Auto degassing liquid ends in NP with a valve spring of Hastelloy C and PVDF valve insert. PVT7 versions with PVDF / PTFE wetted parts.

Diaphragm with PTFE face.

Permissible ambient temperature: 14 °F to 113 °F | Average power consumption: 25 / 30 W | Degree of protection: IP 66/NEMA 4X

FKM = fluorine rubber