

gamma/ X Series

X-tremely clever!



The 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 back pressure 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 50 and 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	16.4	(5)	1/4	7.9	9
0708	102	(7)	2.0	(7.6)	0.63	200	1/2 x 3/8	13.1	(4)	1/4	8.1	11
0414	58	(4)	3.56	(13.5)	1.13	200	1/2 x 3/8	9.8	(3)	1/4	8.1	11
0220	29	(2)	5.2	(19.7)	1.64	200	1/2 x 3/8	6.5	(2)	3/8	8.1	11
2504	363	(25)	1.0	(3.8)	0.32	200	(8 x 4mm)	13.1	(4)	1/4	10.8	12.1
1009	145	(10)	2.38	(9.0)	0.75	200	1/2 x 3/8	9.8	(3)	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	9.8	(3)	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, 3-port (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	8.8	(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 self-bleeding liquid ends, 2-port without bypass (PVT7)												
1602	145	(10)	0.24	(0.9)	0.08	200	1/4 x 3/16	6	(1.8)	-	7.9	-
1604	145	(10)	0.42	(1.60)	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	-

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

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

Permissible ambient temperature: 14 °F to 113 °F | Average power consumption: 78 W | Degree of protection: IP 66

Repeatability ± 2% when utilized and installed per operating instructions

* Capacity data represents minimum values, tested using water at 68 °F (room temperature)

** Suction lift with pre-primed suction line and liquid end

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.

FKM = fluorine rubber

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