

Safe, precise and cost-effective metering

Low-pressure metering pumps up to over 1,000 l/h



Solenoid-driven metering pumps

Low-wear pumps for low capacities

Mode of operation

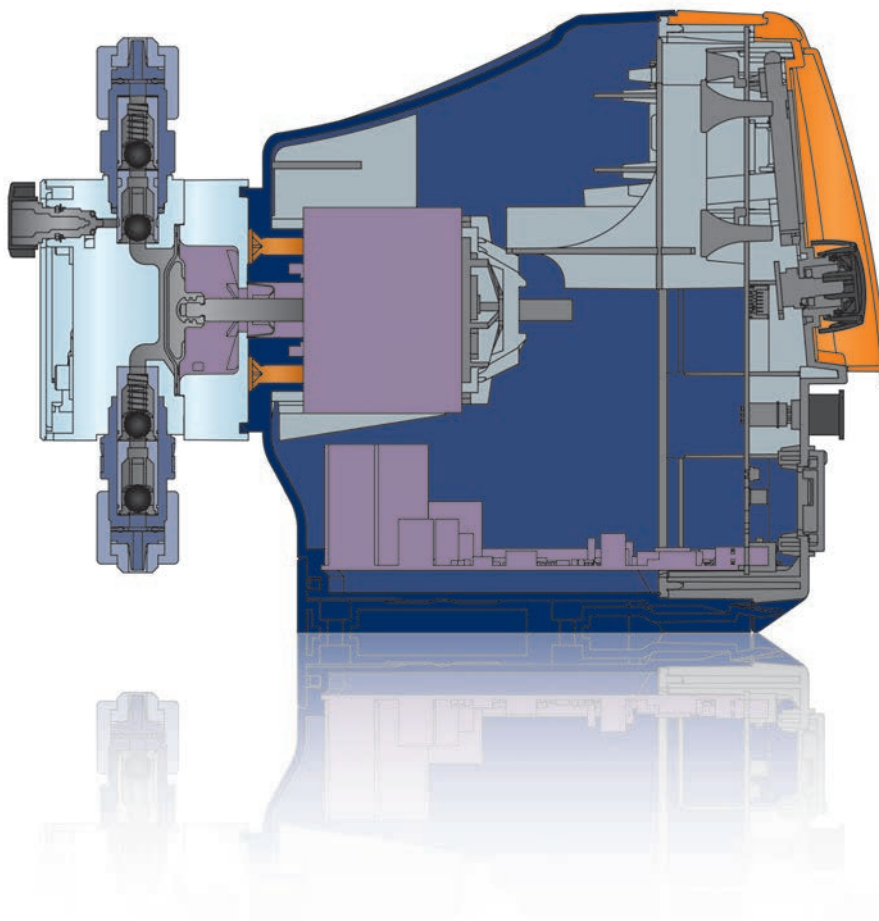
A magnet moves the solenoid shaft forwards and backwards by switching on and off. This stroke movement is transferred to the diaphragm in the dosing head. Two non-return valves prevent the feed chemical from flowing back during pumping. The stroke length and stroke rate can be adjusted to alter the capacity of a solenoid-driven metering pump.

Features

- Capacity range: 0.74 to 80 l/h at 25 to 2 bar back pressure
- Virtually wear-free power end/drive, as only one moving part is used – the pump has no lubricated bearing or shafts
- Outstanding long-term stability
- Cost-effective technical alternative in the lower capacity range
- Maximum protection from overloading
- Low energy consumption thanks to excellent efficiency
- IP 65 degree of protection due to fully sealed housing

Applications

- General: chemical metering in laboratories and in industry up to 80 l/h pumping capacity
- Potable water and swimming pool water treatment: metering of chemicals for disinfection and for pH correction
- General water treatment, process water, industrial water, and conditioners
- Cooling water circuits: metering disinfectants
- Mini-plant technology
- Paper industry, de-foamers
- Electroplating and surface treatment, pool additives, slide grinding systems



Motor-driven metering pumps

High level of dosing precision and robust technology

Mode of operation

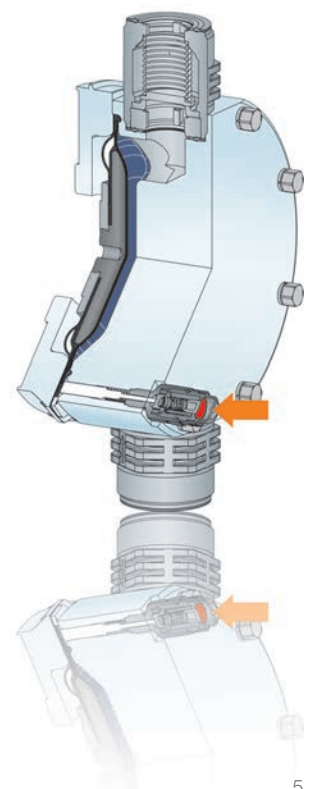
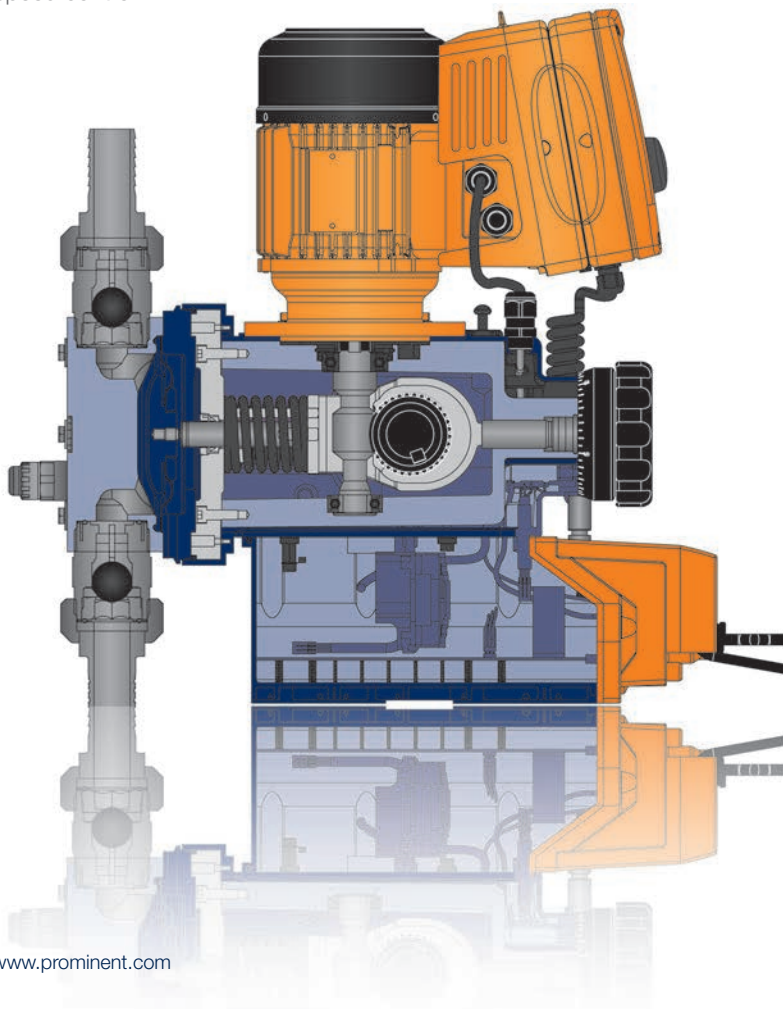
The stroke length and stroke rate – in this case the motor speed – can be adjusted to alter the capacity of this pump. The rotation of the electric motor is stepped down by a worm gear and converted into a linear stroke movement by a cam. The slide rod transfers this stroke movement to the diaphragm in the dosing head. Two non-return valves prevent the feed chemical from flowing back during pumping.

Features

- Extremely broad capacity range
- High dosing precision even under varying pressure conditions (rigid characteristic curve) enables chemical use to be reduced and ensures exact process control
- Robust and cost-effective drive in higher capacity classes
- Simple integration and retrofitting into automated processes by flexible control via stroke length and motor speed control
- Maximum safety thanks to multi-layer safety diaphragm with rupture warning system
- Sigma basic: robust pump for safe and reliable use
- Sigma X control type: reliable, smart and network-friendly

Applications

- General: chemical metering up to over 1,000 l/h
- Potable water treatment: metering disinfectants
- Cooling circuits: metering disinfectants
- Waste water treatment: metering flocculants
- Paper industry: metering additives
- Plastics production: metering additives

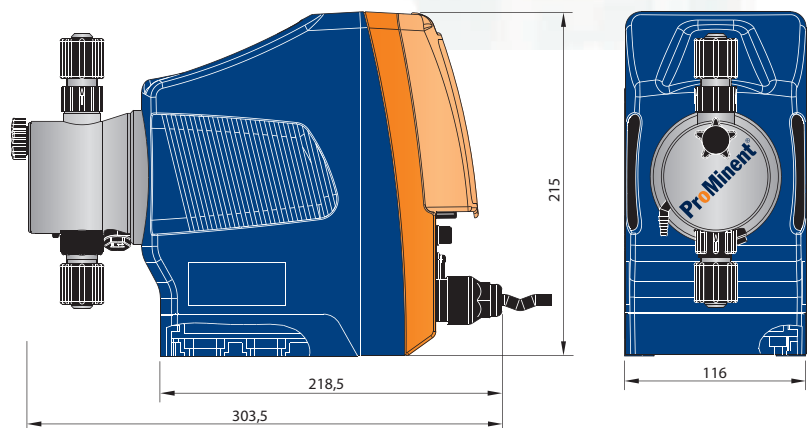


gamma/ X

Solenoid-driven metering pump

The gamma/ X is ideal for all metering work involving liquid media.

- Capacity range
2.3–45 l/h, 25–2 bar
- Simple adjustment of the capacity directly in l/h
- Detection of hydraulic malfunctions or blocked discharge lines ensures smooth process
- Integrated pressure measurement and display for greater safety during commissioning and in the process
- Integrated 7-day timer for timed metering tasks
- Connection to CAN-Open, Profinet, Profibus or Modbus process control systems



Pump type	Pump capacity at max. back pressure			Stroke rate Strokes/min	Suction lift mWs	Connector size a Ø x i Ø mm
	bar	l/h	ml/stroke			
GMXa 1602	16	2.3	0.19	200	6.0	6 x 4
GMXa 1604	16	3.6	0.30	200	5.0	6 x 4
GMXa 0708	7	7.6	0.63	200	4.0	8 x 5
GMXa 0414	4	13.5	1.13	200	3.0	8 x 5
GMXa 0220	2	19.7	1.64	200	2.0	12 x 9
GMXa 2504	25	3.8	0.32	200	4.0	8 x 4 ¹⁾
GMXa 1009	10	9.0	0.75	200	3.0	8 x 5
GMXa 0715	7	14.5	1.21	200	3.0	8 x 5
GMXa 0424	4	24.0	2.00	200	3.0	12 x 9
GMXa 0245	2	45.0	3.70	200	2.0	12 x 9

gamma/ X metering pumps are also available with self-bleeding dosing head and for higher-viscosity media.

Suction lift with a filled dosing head and filled suction line, with a self-bleeding dosing head with air in the suction line.

1) 6 mm connector width for stainless steel design.

Wetted materials					
Design	Dosing head	Suction/pressure connector	Seals	Valve balls	Ball seat
PPT	Polypropylene	PVDF	PTFE	Ceramic	PVDF
NPT	Clear acrylic	PVDF	PTFE	Ceramic	PVDF
PVT	PVDF	PVDF	PTFE	Ceramic	PVDF
TTT	PTFE with carbon	PTFE with carbon	PTFE	Ceramic	Ceramic
SST	Stainless steel material no. 1.4404	Stainless steel material no. 1.4404	PTFE	Ceramic	Ceramic

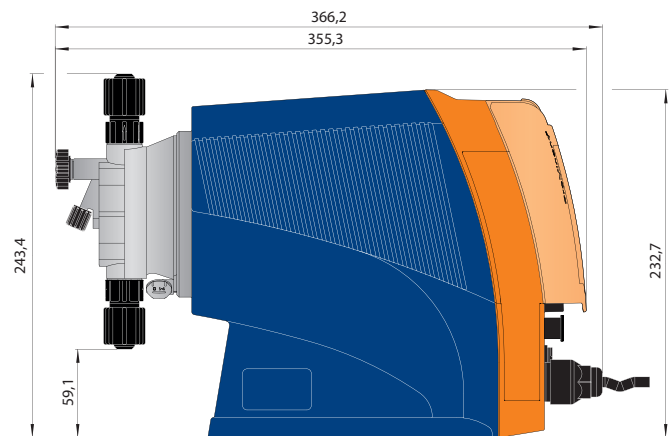
DEVELOPAN® diaphragms with PTFE support in all designs.

gamma/ XL

Solenoid-driven metering pump

The gamma/ XL is a smart, network-compatible solenoid-driven metering pump that is setting new standards in productivity, reliability and cost-effectiveness.

- Capacity range
8–80 l/h, 25–2 bar
- Simple adjustment of the metering rate directly in l/h or gph
- Integrated pressure measurement and display for greater safety during commissioning and in the process
- Bluetooth and Wi-Fi connection for simple configuration and call-up of process data (optional)
- Capacity adjustment range
1:40,000
- Direct input of the required final concentration in concentration mode with volume-proportional metering tasks
- Virtually wear-free solenoid drive, overload-proof and economical



Pump type	Pump capacity		ml/stroke	Stroke rate Strokes/min	Suction lift mWs	Connector size a Ø x i Ø mm
	bar	l/h				
gamma/ XL						
GXL a 2508	25	8	0.67	200	5*	8x4 **
GXL a 1608	16	8	0.67	200	5*	8x5 **
GXL a 1612	16	12	1.0	200	6*	8 x 5
GXL a 1020	10	20	1.7	200	5*	12 x 9
GXL a 0730	7	30	2.5	200	5*	12 x 9
GXL a 0450	4	50	4.2	200	3*	G 3/4 - DN 10
GXL a 0280	2	80	6.7	200	2*	G 3/4 - DN 10
gamma/ XL metering pumps with self-bleeding dosing head without bypass*						
GXL a 1608	16	3.8	0.32	200	1.8	8 x 5
GXL a 1612	16	6.5	0.54	200	1.8	8 x 5
GXL a 1020	10	14	1.17	200	1.8	12 x 9
GXL a 0730	7	28	2.33	200	1.8	12 x 9

* Suction lift (mWs) = suction lift with a filled dosing head and filled suction line

** 6 mm connection width for stainless steel design

Wetted materials					
Design	Dosing head	Suction/pressure connector	Seals	Valve balls	Ball seat
NPT	Clear acrylic	PVDF	PTFE	Ceramic	PVDF
PVT	PVDF	PVDF	PTFE	Ceramic	PVDF
SST (8 - 12 mm)	Stainless steel material no. 1.4404	Stainless steel material no. 1.4404	PTFE	Ceramic	Ceramic
SST (DN 10)	Stainless steel material no. 1.4404	Stainless steel material no. 1.4404	PTFE	Ceramic	PTFE with carbon

Worldwide contacts



Ready for you. Any time, anywhere.

ProMinent is at home in more than 100 countries across the globe. This guarantees the worldwide availability of our products and comprehensive expertise on the ground with close proximity to the customer. We offer the same high quality standards for our solutions and services all over the world. And we work day in, day out to keep our promise: Ready for you. Any time, anywhere.

You can find the contact details of local branches and agencies at www.prominent.com/en/locations

You can find the ProMinent app for iPad and iPhone in the iTunes App Store or at www.prominent.com/app



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