

▶ 46 to 264 gph (174 to 1000 l/h)

# ProMinent® Sigma/ 3

Experts in Chem-Feed and Water Treatment

ProMinent®

## New Technology, Durable Design

The ProMinent® Sigma/ 3 microprocessor controlled metering pumps are programmable and display informative data for monitoring, recording, and tracking. Functions include digital setting of stroke frequency, digital stroke length adjustment, integral variable speed and access codes. Displays include flow rate (gph or l/h) and totalized flow (gallons or liters), cumulative stroke count, and stroke length adjustment. Options include remote monitoring, diagnostics, control (via fieldbus, analog, pulse and/or timer), access codes, fault/pacing relays, mA analog output, and flow monitoring. Control version pumps are supplied with an integral TEFC motor.

The ProMinent® Sigma/3 Control is a mechanically-actuated diaphragm metering pump capable of flow rate from **46 to 264 gph (174 - 1000 l/h)** at 60 Hz operation. Also available in basic design, non-microprocessor based version.



ProMinent® Sigma/3 Control

## Features and benefits

- Universally compatible PVDF liquid ends
- Microprocessor control: optimum combination of variable AC frequency combined with digital stroking frequency, ensures exact metering even in the lower minimum range due to individual stroke control.
- The individual pump functions are adjustable by using the five programming keys.
- A large backlit LCD indicates the current operating status.
- 3-LED-function as operation indicators, alarm indicator and fault indicator
- Problem-free connection to complex process control systems with the option of PROFIBUS®-DP interface.
- Control via contact or analogue signals (e.g. 0/4-20 mA)
- On demand, integration of 2-week-process timer. The intelligent alternative.

## Applications

- Proportional chemical addition in water treatment, e.g. Sodium Hypochlorite for drinking water disinfection
- Measurement-dependent chemical addition, e.g. acid and caustic metering for pH neutralization in wastewater treatment
- Time-controlled chemical addition in cooling water circuits
- Pulse-controlled metering from variable flow meters

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## Capacity Data

Pump version:	Capacity at Max. Pressure		Max. Stroke Rate	Output per Stroke	Max. Suction Lift	Max. Suction Pressure	Suction/ Discharge Connector		Shipping Weight w/Motor
	psig	(bar)	U.S. (L/h) GPH	Stroke/ min.	mL/ stroke	(water) ft. (m)	psig (bar)	DN in.	(approx.) lbs. (kg)
S3Ba/S3Ca									
120145 PVT	145	(10)	46 (174)	86/90	31.5	16 (5)	29 (2)	25 1 MNPT	49 (22)
120145 SST	174	(12)	46 (174)	86/90	31.5	16 (5)	29 (2)	25 1 MNPT	57 (26)
120190 PVT	145	(10)	60.2 (228)	124/120	31.5	16 (5)	29 (2)	25 1 MNPT	49 (22)
120190 SST	174	(12)	60.2 (228)	124/120	31.5	16 (5)	29 (2)	25 1 MNPT	57 (26)
120270 PVT	145	(10)	85.6 (324)	173/180	31.5	16 (5)	29 (2)	25 1 MNPT	49 (22)
120270 SST	174	(12)	85.6 (324)	173/180	31.5	16 (5)	29 (2)	25 1 MNPT	57 (26)
070410 PVT	100	(7)	130 (492)	86/90	95.1	13 (4)	14.5 (1)	32 1 MNPT	53 (24)
070410 SST	100	(7)	130 (492)	86/90	95.1	13 (4)	14.5 (1)	32 1 MNPT	64 (29)
070580 PVT	100	(7)	184 (696)	124/120	95.1	13 (4)	14.5 (1)	32 1 MNPT	53 (24)
070580 SST	100	(7)	184 (696)	124/120	95.1	13 (4)	14.5 (1)	32 1 MNPT	64 (29)
040830 PVT	58	(4)	264 (1000)	173/180	95.1	10 (3)	14.5 (1)	32 1 MNPT	53 (24)
040830 SST	58	(4)	264 (1000)	173/180	95.1	10 (3)	14.5 (1)	32 1 MNPT	64 (29)

## Sigma/ 3 motors

### Basic type

The pump may be operated manually by adjusting the stroke length knob (displacement per stroke). Automatic control of displacement per stroke via a 4-20 mA analog or 3P signal is possible with optional servomotor. Control of stroke frequency via analog signal is possible with variable speed drives (DC/SCR or AC inverter).

### Control type

Pump settings are programmable and viewed on an illuminated LCD. Functions include stroke frequency, batch delivery and external control by pulse or analog signal.

The Sigma/3 control version features information displays for flow rate (in gph or l/h) and totalized flow (gallons or litres); accumulative stroke count with clear/reset capabilities; and stroke length adjustment displayed in increments of 1%. Three LED lights indicate operating status. Options include a programmable access code, flow monitoring, fault and pacing relays, calibration, timer and 4-20 mA output.

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