

► from 5.2 - 31.7 gph (20 - 120 l/h)

ProMinent® Sigma/ 1 control

Experts in Chem-Feed and Water Treatment

ProMinent®

New Technology, Durable Design

ProMinent® Sigma/1 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/1 Control** is a mechanically-actuated diaphragm metering pump capable of flow rates from **5.2 to 31.7 gph (20 to 120 L/h)** and pressures up to **174 PSI (12 bar)**.

Features and benefits

- Universally compatible PVDF liquid ends
- Drive unit is adjustable at 90° angles to the base
- 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
- Simple adjustment of pump functions via panel 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 PROFIBUS®-DP interface.
- Control via contact or analog signals (e.g. 0/4-20 mA)
- On demand, integration of 2-week-process timer



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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	
Pump version:	psig	(bar)	U.S. (L/h) GPH	Stroke/ min.	mL/ stroke	(water) ft. (m)	psig (bar)	DN in.	(approx.) lbs.	(kg)
S1Ca HM										
12017 PVT	145	(10)	5.2 (20)	90	4	23 (7)	14.5 (1)	10 1/2 MNPT	19.8	(9)
12017 SST	174	(12)	5.2 (20)	90	4	23 (7)	14.5 (1)	10 3/8 FNPT	26.5	(12)
12035 PVT	145	(10)	11.1 (42)	170	4	23 (7)	14.5 (1)	10 1/2 MNPT	19.8	(9)
12035 SST	174	(12)	11.1 (42)	170	4	23 (7)	14.5 (1)	10 3/8 FNPT	26.5	(12)
10050 PVT	145	(10)	13.2 (50)	200	4	23 (7)	14.5 (1)	10 1/2 MNPT	19.8	(9)
10050 SST	145	(10)	13.2 (50)	200	4	23 (7)	14.5 (1)	10 3/8 FNPT	26.5	(12)
10022 PVT	145	(10)	6.8 (26)	90	5.1	19.6 (6)	14.5 (1)	10 1/2 MNPT	19.8	(9)
10022 SST	145	(10)	6.8 (26)	90	5.1	19.6 (6)	14.5 (1)	10 3/8 FNPT	26.5	(12)
10044 PVT	145	(10)	14 (53)	170	5.1	19.6 (6)	14.5 (1)	10 1/2 MNPT	19.8	(9)
10044 SST	145	(10)	14 (53)	170	5.1	19.6 (6)	14.5 (1)	10 3/8 FNPT	26.5	(12)
07065 PVT	102	(7)	17.2 (65)	200	5.1	19.6 (6)	14.5 (1)	10 1/2 MNPT	19.8	(9)
07065 SST	102	(7)	17.2 (65)	200	5.1	19.6 (6)	14.5 (1)	10 3/8 FNPT	26.5	(12)
07042 PVT	102	(7)	13.2 (50)	90	9.7	9.8 (3)	14.5 (1)	15 3/4 MNPT	21	(9.5)
07042 SST	102	(7)	13.2 (50)	90	9.7	9.8 (3)	14.5 (1)	15 1/2 FNPT	29.8	(13.5)
04084 PVT	58	(4)	26.7 (101)	170	9.7	9.8 (3)	14.5 (1)	15 3/4 MNPT	21	(9.5)
04084 SST	58	(4)	26.7 (101)	170	9.7	9.8 (3)	14.5 (1)	15 1/2 FNPT	29.8	(13.5)
04120 PVT	58	(4)	31.7 (120)	200	9.7	9.8 (3)	14.5 (1)	15 3/4 MNPT	21	(9.5)
04120 SST	58	(4)	31.7 (120)	200	9.7	9.8 (3)	14.5 (1)	15 1/2 FNPT	29.8	(13.5)

Sigma/ 1 control motors

The Sigma/1 microprocessor controlled metering pump (S1Ca) is supplied with an integral TEFC motor. The Sigma basic version (S1Ba) is suitable for simple metering pump applications. 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 signal is possible with an optional servomotor. See identity code for motor options.

Optional servomotor available for automatic control of displacement per stroke (via a 4-20 mA analog signal).

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