

# Sigma/ 3 Series

New Technology, Durable Design



The **ProMinent® Sigma/ 3** is a mechanically-actuated diaphragm metering pump is capable of flow rates from **46 to 274.7 gph (174 - 1040 l/h)** and pressures up to **174 psig (12 bar)**. The entire Sigma motor-driven metering pump product range, control type S1Cb/S2Cb/S3Cb, has been equipped with intelligent features to provide a high level of operating convenience, safety and efficiency. The pump series comes with a removable HMI operating unit for complete system integration. **Also available in basic (non-microprocessor based version) and explosion proof models.**

## Features & Benefits

- Certified to NSF/ANSI 61 (PVDF liquid ends)
- Variable AC frequency combined with digital stroking frequency
- Removable HMI unit with large illuminated LCD
- 3 LED's function as operation indicators, alarm indicator and fault indicator
- Connection to PROFIBUS®-DP interface
- Control via contact or analog signals
- Reduced power consumption due to control of speed profile and pump demand
- Integrated multilayer safety diaphragm (standard) with visual or electrical rupture indicator

## Applications

- Time controlled chemical addition in cooling water circuits
- Proportional chemical addition in water treatment (e.g. Sodium Hypochlorite for drinking water disinfection)
- Measurement dependent chemical addition (e.g. acid & caustic metering for pH neutralization in wastewater treatment)
- Pulse controlled metering from variable flow meters
- Chemical Process, Mining, Petrochemical, Heavy Industrial, Pharmaceutical, Water and Wastewater Treatment

# Sigma/ 3 Series

## Capacity data: Sigma/ 3 Control Version

Capacity Data														
Pump Version	Capacity at Maximum Back Pressure				Max. Stroking Rate	Output per Stroke	Pre-Primed Suction Lift		Max. Suction Pressure		Suction/Discharge Connector		Shipping Weight	
	psig	(bar)	gph	(l/h)			spm	ml/stroke	ft	(m)	psig	(bar)	in	(DN)
<b>S3Cb H</b>														
120145 PVT	145	(10)	48.1	(182)	90	33.7	16	(5)	29	(2)	1 MNPT	(25)	49	(22)
120145 SST	174	(12)	48.1	(182)	90	33.7	16	(5)	29	(2)	1 MNPT	(25)	57	(26)
120190 PVT	145	(10)	64.2	(243)	120	33.7	16	(5)	29	(2)	1 MNPT	(25)	49	(22)
120190 SST	174	(12)	64.2	(243)	120	33.7	16	(5)	29	(2)	1 MNPT	(25)	57	(26)
120270 PVT	145	(10)	96.4	(365)	180	33.8	16	(5)	29	(2)	1 MNPT	(25)	49	(22)
120270 SST	174	(12)	96.4	(365)	180	33.8	16	(5)	29	(2)	1 MNPT	(25)	57	(26)
070410 PVT	100	(7)	132.1	(500)	90	95.1	13	(4)	14.5	(1)	1-1/2 MNPT	(32)	53	(24)
070410 SST	100	(7)	132.1	(500)	90	95.1	13	(4)	14.5	(1)	1-1/2 MNPT	(32)	64	(29)
070580 PVT	100	(7)	177	(670)	120	95.1	13	(4)	14.5	(1)	1-1/2 MNPT	(32)	53	(24)
070580 SST	100	(7)	177	(670)	120	95.1	13	(4)	14.5	(1)	1-1/2 MNPT	(32)	64	(29)
040830 PVT	58	(4)	274.7	(1040)	180	95.1	10	(3)	14.5	(1)	1-1/2 MNPT	(32)	53	(24)
040830 SST	58	(4)	274.7	(1040)	180	95.1	10	(3)	14.5	(1)	1-1/2 MNPT	(32)	64	(29)

## Capacity data: Sigma/ 3 Basic Version

Capacity Data														
Pump Version	Capacity at Maximum Back Pressure				Max. Stroking Rate	Output per Stroke	Pre-Primed Suction Lift		Max. Suction Pressure		Suction/Discharge Connector		Shipping Weight	
	psig	(bar)	gph	(l/h)			spm	ml/stroke	ft	(m)	psig	(bar)	in	(DN)
<b>S3Ba H</b>														
120145 PVT	145	(10)	46	(174)	86	33.7	16	(5)	29	(2)	1 MNPT	(25)	49	(22)
120145 SST	174	(12)	46	(174)	86	33.7	16	(5)	29	(2)	1 MNPT	(25)	57	(26)
120190 PVT	145	(10)	66.2	(251)	124	33.7	16	(5)	29	(2)	1 MNPT	(25)	49	(22)
120190 SST	174	(12)	66.2	(251)	124	33.7	16	(5)	29	(2)	1 MNPT	(25)	57	(26)
120270 PVT	145	(10)	92.6	(350)	173	33.8	16	(5)	29	(2)	1 MNPT	(25)	49	(22)
120270 SST	174	(12)	92.6	(350)	173	33.8	16	(5)	29	(2)	1 MNPT	(25)	57	(26)
070410 PVT	100	(7)	130	(492)	86	95.1	13	(4)	14.5	(1)	1-1/2 MNPT	(32)	53	(24)
070410 SST	100	(7)	130	(492)	86	95.1	13	(4)	14.5	(1)	1-1/2 MNPT	(32)	64	(29)
070580 PVT	100	(7)	183.9	(696)	124	95.1	13	(4)	14.5	(1)	1-1/2 MNPT	(32)	53	(24)
070580 SST	100	(7)	183.9	(696)	124	95.1	13	(4)	14.5	(1)	1-1/2 MNPT	(32)	64	(29)
040830 PVT	58	(4)	264.2	(1000)	173	95.1	10	(3)	14.5	(1)	1-1/2 MNPT	(32)	53	(24)
040830 SST	58	(4)	264.2	(1000)	173	95.1	10	(3)	14.5	(1)	1-1/2 MNPT	(32)	64	(29)