

NEW PRODUCT INFORMATION

RELEASE DATE: February 6, 2009
PRODUCT: ProMinent Sigma/1 Explosion-Proof

ProMinent is pleased to announce the **immediate availability** of New Explosion-Proof options for Sigma/1 pumps (basic version only). The Sigma/1 (basic) line is now suitable for operation in hazardous or volatile areas.

This means that one of ProMinent's most popular metering pumps can now be applied to the following hazardous metering environments with flow rates up to 38 gph and pressures up to 174 PSI:

- Chemical Processing
- Heavy Industrial
- Pharmaceutical
- Petrochemical
- Fine Dust Environments
- Mining

IMPORTANT NOTE TO SALES: when quoting Sigma/1 basic pumps with Explosion-Proof motors, please be aware that there is only one new identity code option, but one of two new available part numbers must be chosen.

This file contains electronic formats of sales and technical documentation, which will be available to order in print in the coming weeks.

NEW: cut sheet (order copies after 3/1/09)

► Metering Pump for Explosion-Proof Applications

ProMinent® Sigma/ 1 Explosion-Proof

ProMinent®

Experts in Chemical Feed and Water Treatment

Safe for Hazardous Metering

The choice for simple metering in hazardous applications. The **ProMinent® Sigma/1 Explosion-Proof** motorized pump may be operated manually by adjusting the stroke length knob (displacement per stroke) at a constant stroke frequency using a constant or variable speed motor. Automatic control of displacement per stroke via analog (4-20mA) signal is possible with optional motorized stroke positioning systems (Also Explosion-Proof).

The **ProMinent® Sigma/1** is a mechanically-actuated diaphragm metering pump capable of flow rates to **38 gph (144 L/h)** and pressures up to **174 PSI (12 bar)**.



ProMinent® Sigma/ 1 Explosion-Proof

Features and benefits

- UL listed, CSA certified, Class I Groups C&D and Class II Groups F&G
- Safe metering in hazardous/classified areas
- Mechanically-actuated diaphragm metering pump
- Rugged metal inner casing for components, with a corrosion-resistant housing
- PVDF and stainless steel liquid ends available
- Three drive versions available
- Reproducible metering accuracy at defined conditions and correct installation better than $\pm 2\%$ (stroke length area 30-100 %)

Applications

- Chemical process
- Mining
- Petrochemical
- Heavy industrial
- Pharmaceutical
- Fine dust environments
- Generally hazardous areas

ProMinent® Sigma/ 1 Explosion-Proof

Experts in Chemical Feed and Water Treatment

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)	in.	(approx.) lbs. (kg)
S1Ba HM**									
12017 PVT	145 (10)		5.2 (20)	88	4	23 (7)	14.5 (1)	1/2 MNPT	41.0 (20)
12017 SST	174 (12)		5.2 (20)	88	4	23 (7)	14.5 (1)	3/8 FNPT	48.0 (22)
12035 PVT	145 (10)		11.1 (42)	172	4	23 (7)	14.5 (1)	1/2 MNPT	41.0 (20)
12035 SST	174 (12)		11.1 (42)	172	4	23 (7)	14.5 (1)	3/8 FNPT	48.0 (22)
10050 PVT	145 (10)		15.8 (60)	240	4	23 (7)	14.5 (1)	1/2 MNPT	41.0 (20)
10050 SST	145 (10)		15.8 (60)	240	4	23 (7)	14.5 (1)	3/8 FNPT	48.0 (22)
10022 PVT	145 (10)		6.8 (26)	88	5.1	19.6 (6)	14.5 (1)	1/2 MNPT	41.0 (20)
10022 SST	145 (10)		6.8 (26)	88	5.1	19.6 (6)	14.5 (1)	3/8 FNPT	48.0 (22)
10044 PVT	145 (10)		14 (53)	172	5.1	19.6 (6)	14.5 (1)	1/2 MNPT	41.0 (20)
10044 SST	145 (10)		14 (53)	172	5.1	19.6 (6)	14.5 (1)	3/8 FNPT	48.0 (22)
07065 PVT	102 (7)		20.6 (78)	240	5.1	19.6 (6)	14.5 (1)	1/2 MNPT	41.0 (20)
07065 SST	102 (7)		20.6 (78)	240	5.1	19.6 (6)	14.5 (1)	3/8 FNPT	48.0 (22)
07042 PVT	102 (7)		13.2 (50)	88	9.7	9.8 (3)	14.5 (1)	3/4 MNPT	42.0 (20)
07042 SST	102 (7)		13.2 (50)	88	9.7	9.8 (3)	14.5 (1)	1/2 FNPT	51.0 (23)
04084 PVT	58 (4)		26.7 (101)	172	9.7	9.8 (3)	14.5 (1)	3/4 MNPT	42.0 (20)
04084 SST	58 (4)		26.7 (101)	172	9.7	9.8 (3)	14.5 (1)	1/2 FNPT	51.0 (23)
04120 PVT	58 (4)		38 (144)	240	9.7	9.8 (3)	14.5 (1)	3/4 MNPT	42.0 (20)
04120 SST	58 (4)		38 (144)	240	9.7	9.8 (3)	14.5 (1)	1/2 FNPT	51.0 (23)

* Flow rates listed are for 1/8 HP standard motor.
Addition of 1/3 HP or 1/2 HP motor may increase output.
Contact factory for details.

** Sigma/1 Metering Pumps are also available in Non Explosion-Proof microprocessor based control versions

Sigma/ 1 Explosion-Proof Motor Specs

HP	kw	ENCLOSURE	PH	Hz	VOLTS	AMPS	DUTY	INSL	WT	Overload
1/3	0.25	EPFC	1	60	115/208-230	6.6/3.1-3.3	Continuous	B3	26 lbs	Auto
*1/2	0.37	EPFC	3	60	208-230/460	2.2-2.4/1.2	Continuous	F3	28 lbs	Auto

*Inverter Duty Motor

ProMinent motorized explosion proof pumps are also available in the Sigma/2, Sigma/3 and ProMus Models. We also offer the EXtronic, solenoid driven explosion proof pump.

ProMinent Fluid Controls, Inc. (US)

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Pittsburgh, PA 15275-1014
Tel: (412) 787-2484
Fax: (412) 787-0704
eMail: sales@prominent.us
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ProMinent Fluid Controls Ltd. (Canada)

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Guelph, ON N1G 4P5
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eMail: sales@prominent.ca
www.prominent.ca

ProMinent®

ProMinent® Sigma/ 1 Motor Diaphragm Metering Pumps

Identcode Ordering System (S1Ba)

S1Ba Sigma/1 Basic Version a

H	Main Drive, Diaphragm									
	Pump version: 12017* 07042 12035* 04084 10050 04120 10022 10044 07065		* For PVDF versions. Max. 145 psig Note: Refer to technical data for capacities and stroke rates							
	PV	Liquid end material: PVDF SS 316 Stainless steel								
	T	Seal material: PTFE								
		0	Diaphragm type: Standard diaphragm							
		1	With double diaphragm and failure monitor (NC contact opens on fault)							
		0	Liquid end version: Without valve springs							
		1	With 2 valve springs (Hastelloy C4, 1 psig)							
		7	Connectors: PVDF clamping nut & insert							
		8	SS clamping nut & insert							
		0	Labeling: Standard with logo							
		S	Voltage supply: 3 ph, 230 V/400 V, 50/60 Hz							
		M	1 ph, AC, 230 V, 50/60 Hz							
		N	1 ph, AC, 115 V, 60 Hz							
		K	90 VDC Permanent magnet							
		3	Explosion Proof**							
		0	Enclosure rating: Standard							
		0	Stroke sensor: Without stroke sensor (Standard)							
		2	With Pacing relay (Consult Factory)							
		0	Stroke length adjustment: Manual (Standard)							
		4	W/ stroke positioning motor 4 - 20 mA, 230 V 50/60 Hz							
		6	W/ stroke positioning motor 4 - 20 mA, 115 V 50/60 Hz							
** EXPLOSION PROOF MOTOR (INCLUDING MOUNTING FLANGE): 1) pn. 7500344 1/3 HP, single ph, AC, 115 V, 60 Hz, EPFC (class 1 Group C & D or class 2 group F & G T3B) 2) pn. 7746261 1/2 HP, 3 ph, 1D, 208-230/ 460 VAC EPFC (class 1 Group C & D or class 2 group F & G T3B)										

NEW: EX-proof
identity code
option

NEW: EX-proof
motor technical
data

S1Ba H 10044 PV T 0 0 7 0 2 0 0 0 0

Pump & Systems Accessories

Motors

AC and DC Motors

AC motors

All AC motors are recognized by Underwriters Laboratories component approval program, and Canadian Standards Association.

All motors are 1725 RPM, C-faced, and 60 Hz. Manufacturer may vary.

					Part No.
1/3 HP	TEFC	56-C	115/208-230V	1 phase	7951046
1/3 HP	TEFC	56-C	208-230/460V	3 phase	7951048
1/2 HP	TEFC	56-C	115/208-230V	1 phase	7951021
1/2 HP	TEFC	56-C	208-230/460V	3 phase	7951023
3/4 HP	TEFC	56-C	115/208-230V	1 phase	7951060
3/4 HP	TEFC	56-C	208-230/460V	3 phase	7951061
1 HP	TEFC	56-C	208-230/460V	3 phase	7951024
1-1/2 HP	TEFC	56-C w/base	115/208-230V	1 phase	7951025
1-1/2 HP	TEFC	56-C w/base	208-230/460V	3 phase	7951026
3 HP	TEFC	**184TC	230V	1 phase	7951141
3 HP	TEFC	**182TC	208-230/460V	3 phase	7951142

* Must use adapter (see below)

NEW: EX-motor descriptions & part numbers

AC explosion-proof motors

Corrosion resistant epoxy finish. Positively locked drive end bearing.
UL and CSA approved for Class I, Group D or Class II, Group F and G.
UL approved cast conduit box-standard.
Manufacturer may vary.

					Part No.
1/3 HP	56-C	115/208-230V	1 phase		7951014
1/3 HP	56-C	208-230/460V	3 phase		7951013
1/3 HP	56-C	115/208-230V	1 phase		*7500344
1/2 HP	56-C	208-230/460V	3 phase		**7746261
1/2 HP	56-C	115/208-230V	1 phase		7951006
1/2 HP	56-C	208-230/460V	3 phase		7951005
3/4 HP	56-C	115/208-230V	1 phase		7951004
3/4 HP	56-C	208-230/460V	3 phase		7951003
1 HP	56-C	208-230/460V	3 phase		7744983
1-1/2 HP	56-C w/base	208-230/460V	3 phase		7951002
3 HP	***182TC	208-230/460V	3 phase		7951001

* For use with Sigma/1 basic pumps only. Includes necessary mounting hardware.

** Sigma/1 basic Explosion-Proof motors for VFD applications. Includes necessary mounting hardware.

*** Must use adapter (see below)

Adapter *** (Required when using motors with 184TC or 182TC face)

Mounting flange and motor shaft coupling (Makro pumps w/3 HP, AC motors)	7951144
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DC motors

Permanent magnet 1750 rpm.

					Part No.
1/3 HP	TENV	90 V	56-C	Sigma	7951078
1/2 HP	TENV	90 V	56-C	Meta	7951079
3/4 HP	TEFC	90 V	56-C	Sigma/3, Meta, Makro, Hydro	7951080
1-1/2 HP	TEFC	180 V	145-TC	Makro, Hydro	7951081
3 HP	TEFC	180 V	184-C	Makro	7951140

ProMinent® Sigma/ 1 Basic List Pricing

Experts in Chemical Feed and Water Treatment

Effective January 1st, 2009
All prices subject to change without notice

Base Model List Pricing

Type	Materials	Base Config	Price
12017	PV	T0070N000	\$1,557
	SS	T0080N000	\$2,044
12035	PV	T0070N000	\$1,557
	SS	T0080N000	\$2,044
10050	PV	T0070N000	\$1,557
	SS	T0080N000	\$2,044
10022	PV	T0070N000	\$1,582
	SS	T0080N000	\$2,064
10044	PV	T0070N000	\$1,582
	SS	T0080N000	\$2,064

Type	Materials	Base Config	Price
07065	PV	T0070N000	\$1,582
	SS	T0080N000	\$2,064
07042	PV	T0070N000	\$1,676
	SS	T0080N000	\$2,293
04084	PV	T0070N000	\$1,676
	SS	T0080N000	\$2,293
04120	PV	T0070N000	\$1,676
	SS	T0080N000	\$2,293

Options List Pricing

Base Model: S1BaH10044 PV T00702000

Category	Option	Description	Price
Seal Material	T	PTFE/Viton seal	\$0
Diaphragm type	0	Standard diaphragm	\$0
	1	With double diaphragm and failure monitor DN10 (NC contact opens on fault)	\$343
	1	With double diaphragm and failure monitor DN15 (NC contact opens on fault)	\$440
Liquid end version	0	Without valve springs	\$0
	1	With 2 valve springs (Hastelloy C4, 1 psig)	\$23
Connectors	7	PVDF clamping nut & insert	\$0
	8	SS clamping nut and insert	\$0
Labeling	0	Standard with logo	\$0
	S	3 pH 230/400 V, 50/60 Hz	\$0
	M	1 pH AC 230 V, 50/60 Hz	\$0
	N	1pH AC 115 V 60 Hz	\$0
	K	90 VDC Permanent magnet	\$420
	3	1/3 HP, single ph, AC, 115 V, 60 Hz, EPFC (class 1 Group C & D or class 2 group F & G T3B): pn. 7500344	\$1,313
	3	1/2 HP, 3 ph, 1D, 208-230/ 460 VAC EPFC (class 1 Group C & D or class 2 group F & G T3B): pn. 7746261	\$1,620
Enclosure rating	0	Standard	\$0
Stroke Sensor	0	Without stroke sensor (standard)	\$0
	2	With Pacing relay (Consult Factory)	\$0
Strokelength adjustment	0	Manual (Standard)	\$0
	1	With 3P stroke positioning motor, 230 V 50/60 Hz	\$1,703
	2	With 3P stroke positioning motor, 115 V 50/60 Hz	\$1,703
	4	W/ stroke positioning motor 4-20 mA, 230 V 50/60 Hz	\$1,891
	6	W/ stroke positioning motor 4-20 mA, 115 V 50/60 Hz	\$1,891

NEW: EX-motor
option & prices
MUST SPECIFY
P.N. WHEN
ORDERING

