

**SIGMA/ 3 MOTOR-DRIVEN METERING PUMP FROM ProMinent.
MAXIMUM POWER IN THE MID-PERFORMANCE RANGE.**



BEST SELLER



ProMinent®

**SIGMA/ 3 – EVEN MORE PERFORMANCE,
EVEN BETTER REPRODUCIBILITY.**



More performance – more precision.

A new microprocessor controller with an optimum combination of speed control and Stop/Go operation offers an extensive control range with selective fine tuning.



More flexibility – less cost!

One for all: standard PVDF liquid end with integrated bypass valve – the correct choice for specialised applications in 99% of cases. Alternative liquid ends available.



Improved feed rate up to 1,000 l/h.

Total control via illuminated LCD display with feed rate shown in l/h or US gal/h. Simple and clear operating menu for feed rate adjustment.



Optimum reliability – the doubled

DEVELOPAN® diaphragm with integrated sensor guarantees effective protection – even in the event of diaphragm rupture.





**ROBUST MECHANICS MEET PRECISION ELECTRONICS.
THE RESULT: LONG TERM RELIABLE PERFORMANCE.**

The operating concept underlying the Sigma/ 3 range guarantees optimum reliability and precision. The power is transmitted from the motor to the metering diaphragm via a worm

long periods in use. Safety is a key factor in the Sigma/ 3. The doubled metering diaphragm made of the DEVELOPAN® material incorporates a sensor situated between the

means of venting the liquid end during priming. There are two different liquid end materials to choose from: PVDF and stainless steel. These material options permit the metering of an

BEST SOLUTION

gear, cam and push rod assembly. The proven spring cam principle ensures play-free mechanism and good reproducibility. It also ensures that metering precision is maintained even after

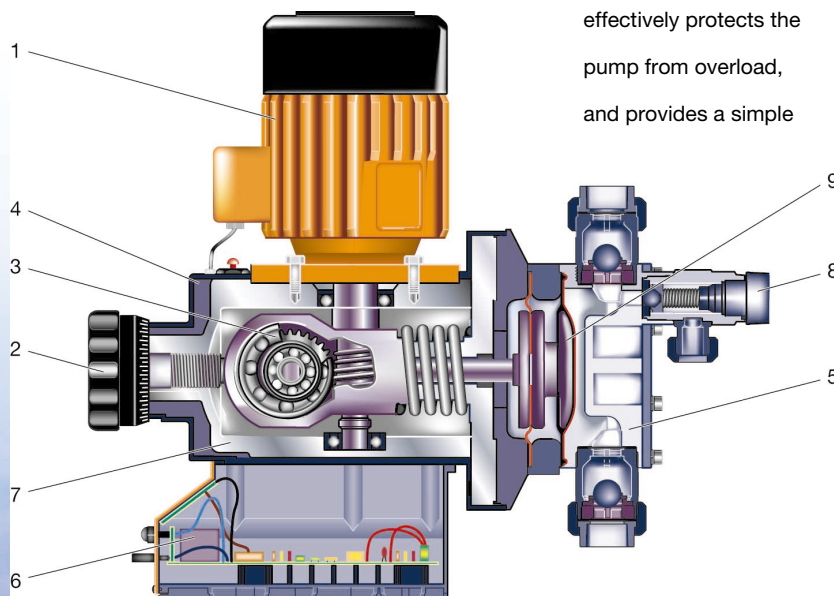
diaphragms. This sensor triggers the diaphragm rupture signalling function, causing the hermetic sealing of the liquid end in the event of diaphragm rupture.

The integrated bypass valve in the liquid end effectively protects the pump from overload, and provides a simple

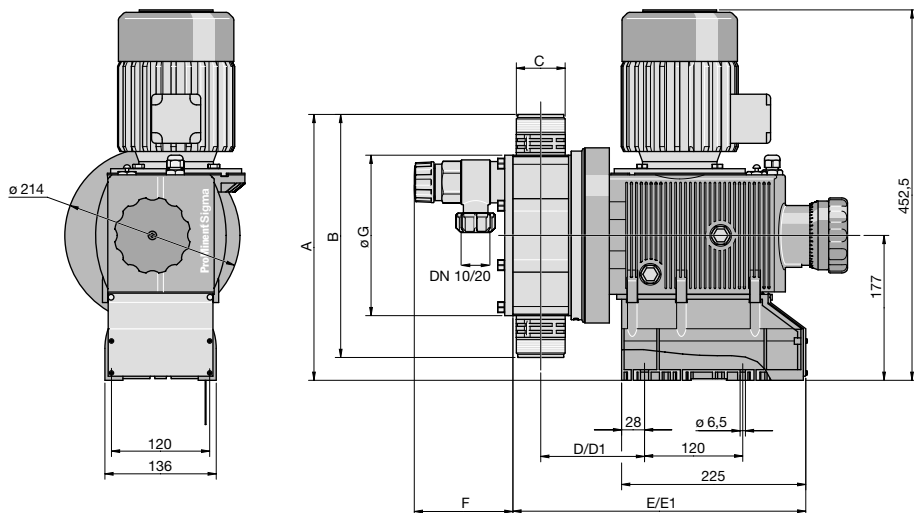


The Sigma/ 3 series also includes an economical base model without the microprocessor controller

extremely wide range of chemicals – even difficult and corrosive chemicals. This means that the Sigma/ 3 series can be adapted to practically any application.



- 1 Motor
- 2 Stroke length adjusting knob
- 3 Gearbox
- 4 Plastic housing
- 5 Liquid end
- 6 Microprocessor controller
- 7 Metal inner housing
- 8 Integrated bypass/vent valve
- 9 Doubled diaphragm system



	Connector	A	B	C	D	D1**	E	E1**	F	ø G
Pump type Sigma/ 3										
120145, 120190	DN 25	292	230	G1½ A	120	140	346	366	82	156
120270, 120330 PVT	DN 25	292	230	G1½ A	121	141	349	369	89	156
120145, 120190										
120270, 120330 SST	DN 32	325	297	G2 A	127	147	358	378	121	206
070410, 070580	DN 32	322	291	G2 A	127	147	358	378	121	206
040830, 041030 PVT										
070410, 070580										
040830, 041030 SST										

Detailed measurement data sheets on request.

** Measurements performed by "Doubled diaphragm"

BEST VALUES

With in-built "intelligence" ensures that the pump to deal with varied require- precision microprocessor

the Sigma/ 3 metering can be used with a wide ments within the chemical controller, comprehensive

pump can be integrated variety of different chemi- industry and in produc- process monitor and

into practically any con- cals. Its main area of tion systems. Sigma/ 3's membrane rupture signal-

trol environment. application is in the treat- high safety standards ling function the Sigma/ 3

The modular assembly ment of drinking water guarantee the protection sets new standards.

concept with two different but its flexible construc- of processes, people and

liquid end materials tion is equally equipped the environment. With a

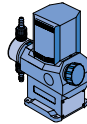
Pump type	Operating at 50 Hz				Operating at 60 Hz				Suction lift	Adm. priming pressure suct. side	Connection suction/dis-charge side	Ship- ping weight
	Feed rate at max. back pressure	max. stroke rate	Feed rate at max. back pressure	Stroke rate at max. back pressure	Feed rate at max. back pressure	Stroke rate at max. back pressure	Feed rate at max. back pressure	Stroke rate at max. back pressure				
Sigma S3Ba	bar	l/h	ml/str.	str./min.	psi	l/h/gph	str./min.	mwg	bar	inches – DN	kg	
120145 PVT	10	145	31.5	72	145	174/46	86	5	2	1½ – DN 25	22	
120145 SST	12	145	31.5	72	174	174/46	86	5	2	1½ – DN 25	26	
120190 PVT	10	190	31.5	103	145	228/60.2	124	5	2	1½ – DN 25	22	
120190 SST	12	190	31.5	103	174	228/60.2	124	5	2	1½ – DN 25	26	
120270 PVT	10	270	31.5	144	145	324/85.6	173	5	2	1½ – DN 25	22	
120270 SST	12	270	31.5	144	174	324/85.6	173	5	2	1½ – DN 25	26	
120330 PVT	10	330	31.5	180	145	–	–	5	2	1½ – DN 25	22	
120330 SST	12	330	31.5	180	174	–	–	5	2	1½ – DN 25	26	
070410 PVT	7	410	95.1	72	100	492/130	86	4	1	2 – DN 32	24	
070410 SST	7	410	95.1	72	100	492/130	86	4	1	2 – DN 32	29	
070580 PVT	7	580	95.1	103	100	696/183.9	124	4	1	2 – DN 32	24	
070580 SST	7	580	95.1	103	100	696/183.9	124	4	1	2 – DN 32	29	
040830 PVT	4	830	95.1	144	58	1000/264	173	3	1	2 – DN 32	24	
040830 SST	4	830	95.1	144	58	1000/264	173	3	1	2 – DN 32	29	
041030 PVT	4	1030	95.1	180	58	–	–	3	1	2 – DN 32	24	
041030 SST	4	1030	95.1	180	58	–	–	3	1	2 – DN 32	29	

SERIAL SUCCESS: ProMinent® MOTOR-DRIVEN DIAPHRAGM METERING PUMPS



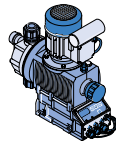
ProMinent® alpha

Capacity range:
up to 10 bar,
up to 21 l/h



ProMinent® Vario

Capacity range:
up to 12 bar,
up to 144 l/h

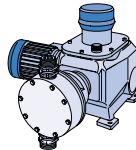
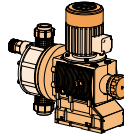


ProMinent® Sigma HM

Capacity range:
up to 12 bar,
up to 420 l/h

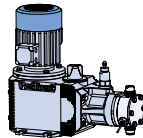
ProMinent® Sigma/ 3

Capacity range:
up to 12 bar,
up to 1030 l/h



ProMinent® Makro TZ HM/HMH

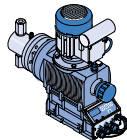
Capacity range:
up to 16 bar,
up to 2500 l/h



ProMinent® Hydro

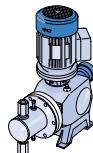
Capacity range:
up to 64 bar,
up to 150 l/h

ProMinent® MOTOR-DRIVEN DIAPHRAGM PISTON PUMPS



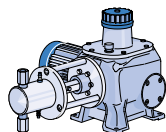
ProMinent® Sigma HK

Capacity range:
up to 320 bar,
up to 76 l/h



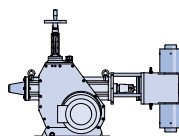
ProMinent® Meta HK

Capacity range:
up to 240 bar,
up to 60 l/h



ProMinent® Makro TZ HK

Capacity range:
up to 320 bar,
up to 1141 l/h



ProMinent® Makro/ 5

Capacity range:
up to 320 bar,
up to 6000 l/h



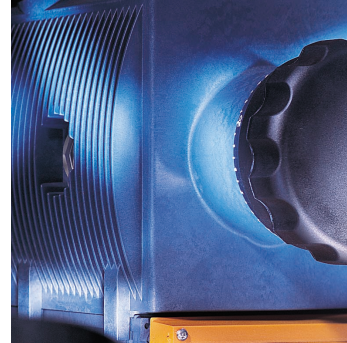
UES

precision microprocessor
controller, comprehensive
process monitor and
membrane rupture signal-
ling function the Sigma/ 3
sets new standards.

Liquid end version

Materials in contact with chemicals	PVT	SST
Liquid end	PVDF*	Stainless steel 1.4571
Suction/ discharge Suction/discharge connector	PVDF*	Stainless steel 1.4581
Seals	PTFE	PTFE
Valve balls in Valve balls	Ceramic	Stainless steel 1.4401
Valve seat Valve seat	PTFE	PTFE
Connector	See identity code selection	

*Polyvinylidene fluoride



The new operator prompts provide simple monitoring of all functions



The new Sigma/ 3 inherits the robust, reliable

With a feed rate of up to 1,000 l/h the Sigma/ 3 is certain to secure its position in many application areas.

The new microprocessor controller is the key feature of the Sigma/ 3.

external control. The operator can select between a 0/4-20 mA analogue standard signal or switch control. With a standard signal the user can specify configuration of the pump frequency to

BEST FORM

mechanical concept of ProMinent® motor-driven metering pumps. It is equipped for the future, however, with an optimum combination of new microprocessor control, speed control and Stop/Go operation. Metering can now be finely adjusted.

With its easy-to-read display it provides clear, convenient operator prompts and simple monitoring of the pump function. Large text and constant illumination mean that all settings and measured variables are instantly accessible, even in unfavourable lighting conditions. The feed rate can be displayed either in l/h or US gal/h. The internal electronics significantly enhance the Sigma/ 3's control options, providing the optimum conditions for



The "traffic light" shows the current pump status at a glance

the control signal, while switch control incorporates increase/reduction of pulse rate.

This flexibility ensures that the Sigma/ 3 series always achieves its best performance in any control environment.

PROMINENT EXPERTISE – ADVANCED SIGMA/ 3.

The Sigma/ 3 is at home
in practically any
process environment



Where commercial
success is concerned,

access to assistance –
anywhere in the world.
ProMinent is active
worldwide. You will find
our consultants and
technicians in all indus-
trial centres and you can
tap into our experience in

who have your success
in mind at all times and
who believe implicitly in
working in partnership
with the customer.

We hereby invite you to
use our experience.



BEST SERVICE

reliable technical prod-
ucts you can trust, like
Sigma/ 3, represent
only one side of the coin.
The other side is expert
support before and
during installation, advice
on new applications and

the field of fluid controls
wherever you are based.
We are happy to provide
advice and assistance
from the initial concept
to the completed installa-
tion. We can be present
at the first production
run, make regular main-
tenance visits or assist
you in retro or refits. You
can rely on specialists



In good hands – around
the world – with the
ProMinent service team

Backing up all Sigma
products is the ProMinent
name, which stands for
sound advice, prompt
service and reliable
products – all over the
world.



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