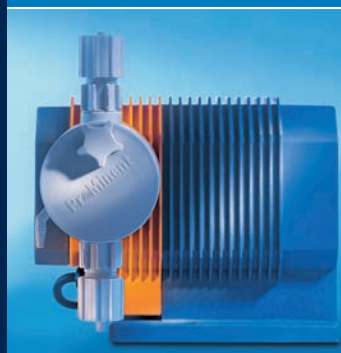


# Safe, precise and cost-effective dosing – with ProMinent

Low-pressure dosing pumps up to 1,000 l/h

Printed in Germany, PT PM 054 09/06 GB  
MT20 01 01/06 GB

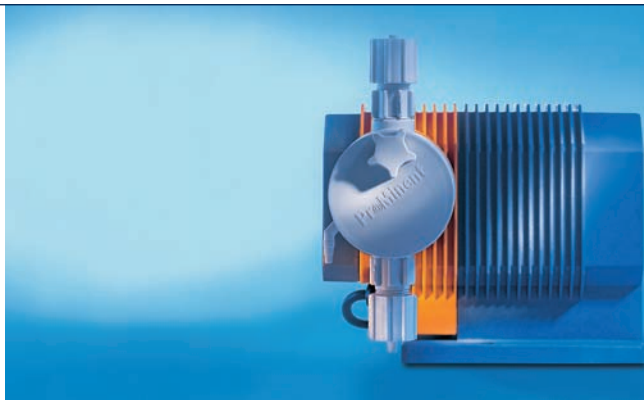


## Solenoid and motor-driven diaphragm dosing pumps

### Motor-driven diaphragm dosing pump alpha

Capacity range 0.5 - 21.5 l/h, 10 - 4 bar.

This dosing pump is designed for simple applications. It is ideally suitable for continuous dosing.



### Solenoid diaphragm dosing pump Beta®

Capacity range 0.74 - 32 l/h, 16 - 2 bar.

The versatility and reliability of this dosing pump are not its only key features. This all-rounder offers an ideal capacity-price ratio too.



### Solenoid diaphragm dosing pump gamma/ L

Capacity range 0.74 - 32 l/h, 16 - 2 bar.

This dosing pump satisfies the highest demands; diverse adjustment and control options enable the pump to be used in stand-alone applications or in complex bus-networked systems.



### Motor-driven diaphragm dosing pump Vario C

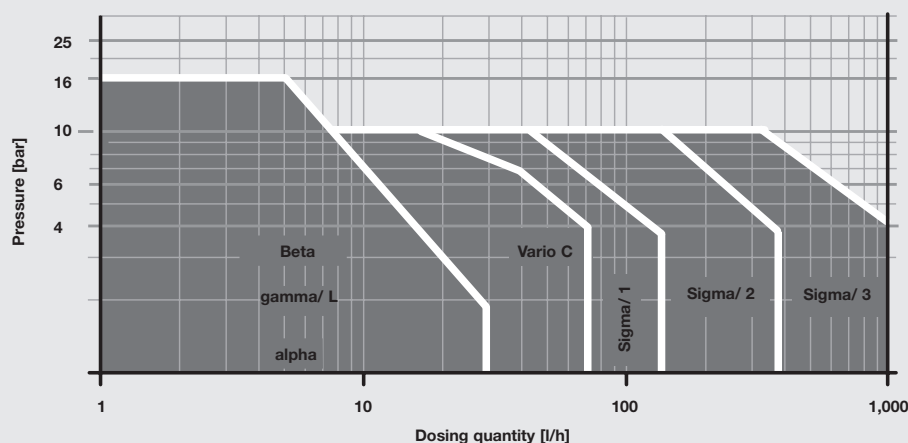
Capacity range 8 - 75 l/h, 10 - 4 bar.

This pump is designed for simple dosing duties. It is particularly suitable for continuous dosing.



# Wide range for reliability and accuracy

Capacity overview of dosing pumps



ProMinent offers an extensive dosing pumps programme with capacities up to 1,000 l/h. All oscillating positive-displacement pumps have a leak-proof, hermetically sealed dosing chamber and an identical operating structure.



## Motor-driven diaphragm dosing pump Sigma/ 1

Capacity range 17 - 144 l/h, 12 - 4 bar. This dosing pump is available as a basic type without its own internal electronics and as a microprocessor version. The pump covers the lower capacity range of the Sigma series.



## Motor-driven diaphragm dosing pump Sigma/ 2

Capacity range 50 - 420 l/h, 16 - 4 bar. With a capacity of up to 420 l/h, this dosing pump covers the medium capacity range of the Sigma series.



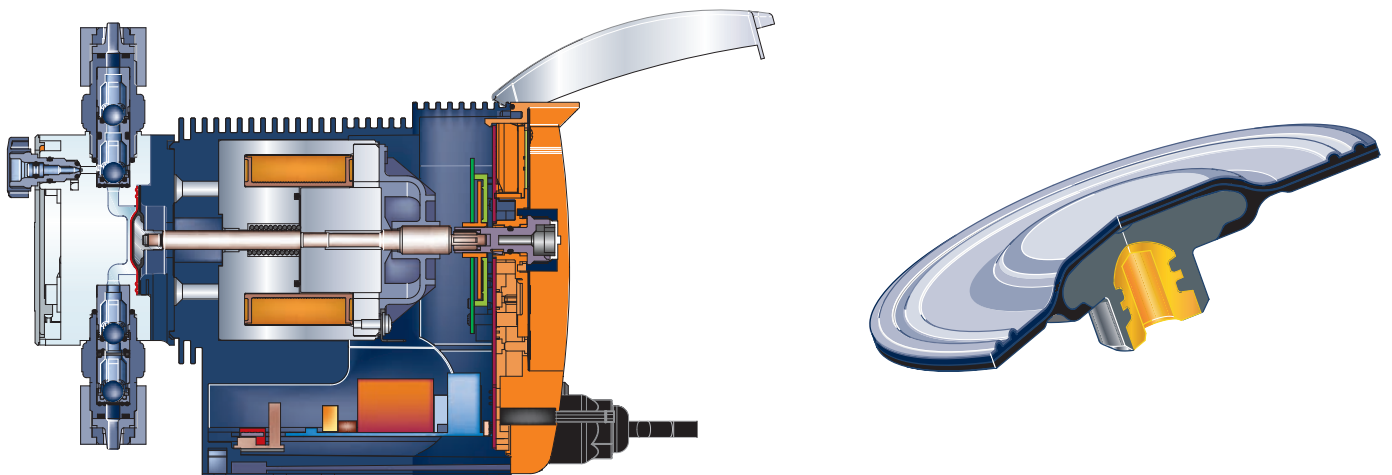
## Motor-driven diaphragm dosing pump Sigma/ 3

Capacity range 145 - 1,030 l/h, 12 - 4 bar. This dosing pump, with a capacity of up to 1,030 l/h, is the most powerful model in the Sigma series. All Sigma pumps are available as basic types and as microprocessor versions.



Further information:  
[www.prominent.com/diaphragm\\_pumps](http://www.prominent.com/diaphragm_pumps)

## Low-wear pumps for small capacities



### Function

The solenoid armature is moved to and fro by switching the solenoid on and off. This stroke movement is transmitted to the dosing diaphragm in the liquid end. Two non-return valves prevent backflow of the dosing medium during the pumping process. The dosing capacity of a solenoid diaphragm dosing pump can be adjusted via the stroke length and the stroke frequency.

### Applications

- General: chemical dosing in laboratories and in industry, with pumping capacities up to 32 l/h
- Potable water and swimming pool water treatment: dosing of chemicals for disinfection and pH adjustment
- Cooling water circuits: dosing of disinfectants
- Mini-plant technology

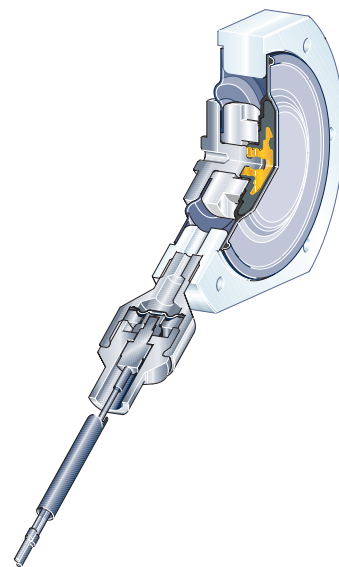
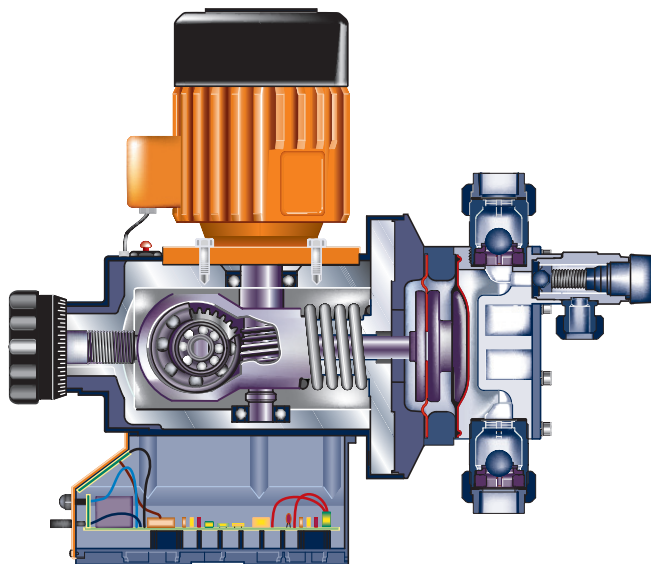
### Features

- Capacity range: 1 to 32 l/h at 16 to 2 bar back pressure
- Virtually wear-free drive with only one moving part. Pump requires no bearing or shaft lubrication
- Outstanding continuous running properties
- Attractive technical alternative in the small capacity range up to 32 l/h and 2 bar
- Maximum protection against overload
- Low energy consumption thanks to high efficiency
- Fully-sealed housing offers IP 65 protection





# High dosing accuracy and robust technology



## Function

The rotation of an electric motor is transferred through a worm gear and converted to a stroke movement via an eccentric cam. The link rod transmits this stroke movement to the dosing diaphragm in the liquid end. Two non-return valves prevent backflow of the dosing medium during the pumping process. The dosing capacity of a motor-driven diaphragm dosing pump can be adjusted via the stroke frequency – in this case the motor speed – and the stroke length.

## Applications

- General: chemical dosing up to over 1,000 l/h
- Potable water treatment: dosing of disinfectants
- Cooling water circuits: dosing of disinfectants
- Wastewater treatment: dosing of flocculants
- Paper industry: dosing of additives
- Plastics manufacturing: dosing of additives

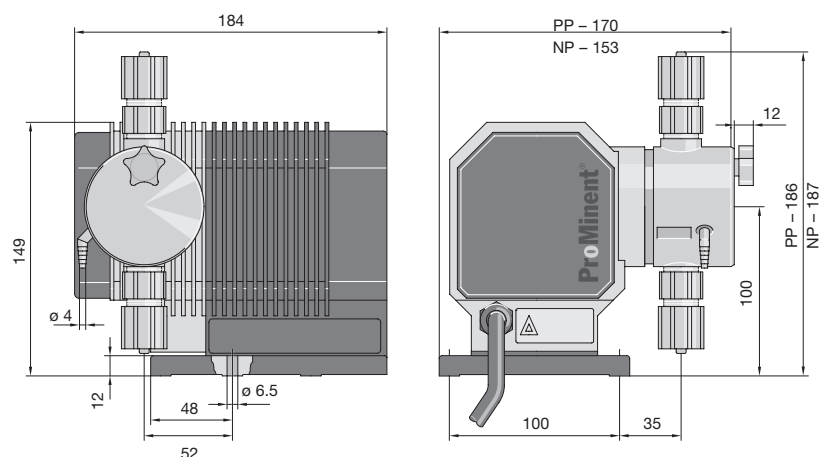
## Features

- Extremely wide capacity range
- High dosing accuracy even with fluctuating pressure conditions (characteristic curve has flat response to changing pressure) ensures savings on chemicals and precise process control
- Robust, attractively priced drive in the higher capacity range
- Simple integration and retrofit in automated processes through flexible control via stroke length and motor speed regulation
- Maximum safety through double diaphragm system and integral overload protection



## Motor-driven diaphragm dosing pump alpha

# Robust and simple



The robust pump for simple applications and continuous dosing.

- Capacity range 0.5 - 21.5 l/h, 10 - 4 bar
- Good suction capacity, smooth dosing stroke and constant, precise dosing
- Safe operation even with effervescent media through patented coarse/fine venting system

- Suitable for many applications through four gear ratios, three sizes of liquid end and two material versions
- Dosing capacity can be adjusted via the stroke length in 10 % steps

alpha								
Pump type	[bar]	on 50 Hz version [l/h]	strokes/min.	on 60 Hz version [psi]	[l/h/gph]	strokes/min.	Suction lift (mWG)	Connector size (ext. Ø x int. Ø mm)
1001	10.0	1.2	30	145	1.4/0.36	36	6	8x5
1002	10.0	2.4	58	145	2.9/0.76	69	6	8x5
1003	10.0	3.5	88	145	4.2/1.1	105	6	8x5
0804	7.5	4.0	30	109	5.0/1.3	36	6	8x5
0808	7.5	8.0	58	109	9.5/2.5	69	6	8x5
0612	5.5	12.0	88	80	14.0/3.6	105	6	8x5
0419	4.0	18.5	128	58	21.5/5.6	154	6	8x5
Materials in contact with chemicals								
Version	Dosing head	Suction/discharge connector	Seals	Ball valves	Patented venting system			
PP1	Polypropylene	Polypropylene	EPDM	Ceramic	yes			
PP2	Polypropylene	Polypropylene	FPM A*	Ceramic	yes			
PP3	Polypropylene	Polypropylene	FPM B*	Ceramic	yes			
NP3	Acrylic (PMMA)	PVC	FPM B*	Ceramic	yes			
NP6	Acrylic (PMMA)	PVC	FPM*	Ceramic	no			

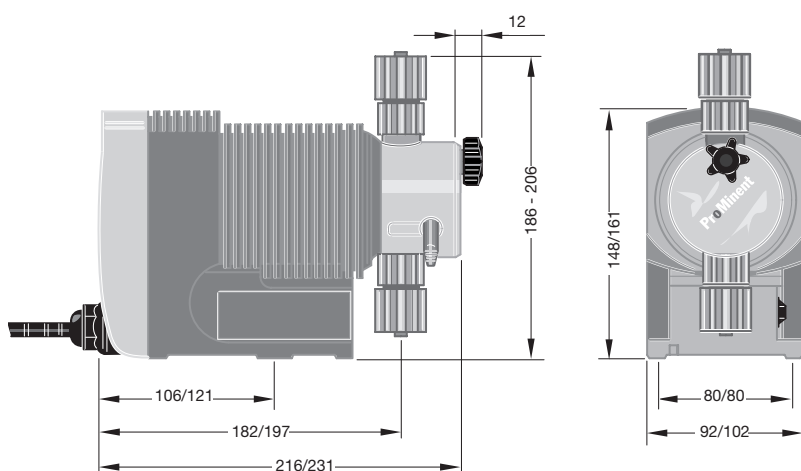
DEVELOPAN® dosing diaphragm with PTFE coating fitted on all versions. \*FPM: Fluoroelastomer



Further information:  
[www.prominent.com/motor\\_pumps](http://www.prominent.com/motor_pumps)

Solenoid-driven diaphragm dosing pump Beta®

# The all-rounder



The pump with all the adjustment and control functions needed for modern-day water treatment.

- Capacity range 0.74 - 32 l/h, 16 - 2 bar
- Simple and fast operation using multi-function knob
- Clear, easy-to understand operating status indications via triple LED display

- Monitoring of the available chemical stock via input for a two-stage level switch with pre-warning
- Volume-proportional, measured value-dependent, time and pulse-controlled dosing possible
- Infinitely-variable stroke length adjustment

Beta®					
Pump type	[bar]	[l/h]	Strokes/min.	Suction lift (mWG)	Connector size (ext. Ø x int. Ø mm)
BT4a 1000	10.0	0.74	180	6	6x4
BT4a 1601	16.0	1.1	180	6	6x4
BT4a 1602	16.0	2.1	180	6	6x4
BT4a 1005	10.0	4.4	180	6	8x5
BT4a 0708	7.0	7.1	180	6	8x5
BT4a 0413	4.0	12.3	180	3	8x5
BT4a 0220	2.0	19.0	180	2	12x9
BT5a 1605	16.0	4.1	180	6	8x5
BT5a 1008	10.0	6.8	180	6	8x5
BT5a 0713	7.0	11.0	180	4	8x5
BT5a 0420	4.0	17.1	180	3	12x9
BT5a 0232	2.0	32.0	180	2	12x9
Materials in contact with chemicals					
Version	Dosing head	Suction/discharge connector	Seals	Ball valves	
PPE	Polypropylene	Polypropylene	EPDM	Ceramic	
PPB	Polypropylene	Polypropylene	FPM*	Ceramic	
NPE	Acrylic (PMMA)	PVC	EPDM	Ceramic	
NPB	Acrylic (PMMA)	PVC	FPM*	Ceramic	
PVT	PVDF	PVDF	PTFE	Ceramic	
TTT	PTFE with carbon	PTFE with carbon	PTFE	Ceramic	
SST	Stainless steel	Stainless steel	PTFE	Ceramic	
	Mat. No. 1.4404	Mat. No. 1.4404			

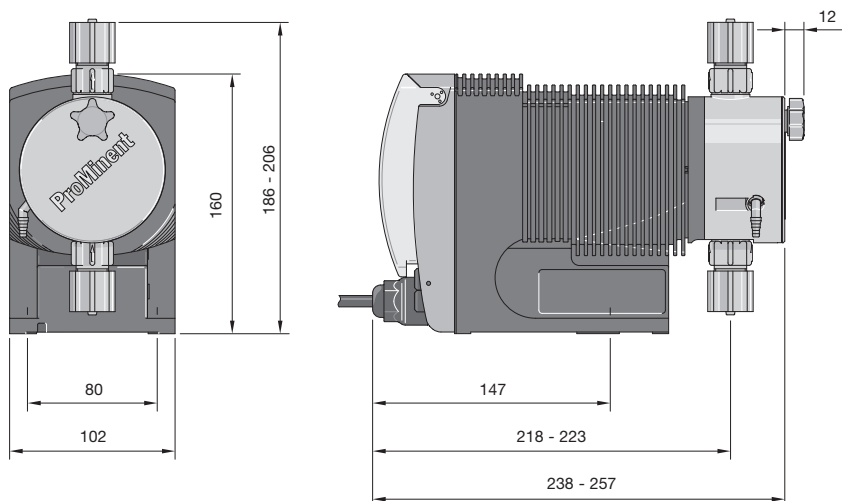
DEVELOPAN® dosing diaphragm with PTFE coating fitted on all versions. \*FPM: Fluoroelastomer



Further information:  
[www.prominent.com/solenoid\\_pumps](http://www.prominent.com/solenoid_pumps)

## Solenoid-driven diaphragm dosing pump gamma/ L

# For a wide range of uses



The key features of this pump, the first calibratable pump in its capacity class, are its ease of operation and diverse possible uses.

- Capacity range 0.74 - 32 l/h, 16 - 2 bar
- Direct adjustment and monitoring of the dosing capacity on a plain text display help prevent incorrect dosing

- Cost and space savings through integral 2-week process timer
- Link to process control system via optional fitted PROFIBUS-DP® interface
- Ideal for highly-automated processes in virtually every industry

gamma/ L					
Pump type	[bar]	[l/h]	Strokes/min.	Suction lift (mWG)	Connector size (ext. Ø x int. Ø mm)
GALa 1000	10	0.74	180	6	6x4
GALa 1601	16	1.1	180	6	6x4
GALa 1602	16	2.1	180	6	6x4
GALa 1005	10	4.4	180	6	8x5
GALa 0708	7	7.1	180	6	8x5
GALa 0413	4	12.3	180	3	8x5
GALa 0220	2	19.0	180	2	12x9
GALa 1605	16	4.1	180	6	8x5
GALa 1008	10	6.8	180	6	8x5
GALa 0713	7	11.0	180	4	8x5
GALa 0420	4	17.1	180	3	12x9
GALa 0232	2	32.0	180	2	12x9
Materials in contact with chemicals					
Version	Dosing head	Suction/discharge connector	Seals	Ball valves	
PPE	Polypropylene	Polypropylene	EPDM	Ceramic	
PPB	Polypropylene	Polypropylene	FPM*	Ceramic	
PVT	PVDF	PVDF	PTFE	Ceramic	
NPE	Acrylic (PMMA)	PVC	EPDM	Ceramic	
NPB	Acrylic (PMMA)	PVC	FPM*	Ceramic	
TTT	PTFE with carbon	PTFE with carbon	PTFE	Ceramic	
SST	Stainless steel	Stainless steel	PTFE	Ceramic	
	Mat. No. 1.4404	Mat. No. 1.4404			

DEVELOPAN® dosing diaphragm with PTFE coating fitted on all versions. \*FPM: Fluoroelastomer

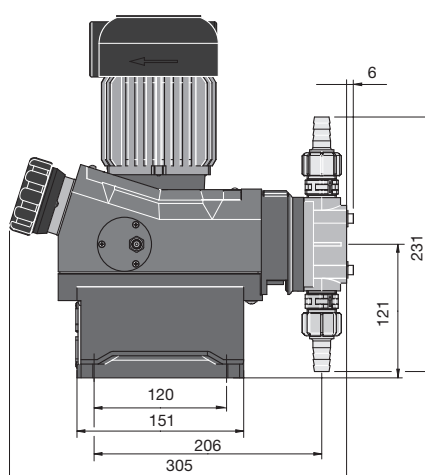
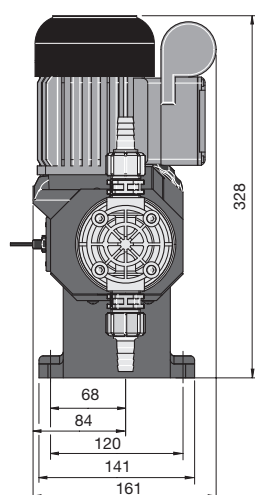


Further information:  
[www.prominent.com/solenoid\\_pumps](http://www.prominent.com/solenoid_pumps)



## Motor-driven diaphragm dosing pump Vario C

# Precise and reliable



The pump for simple applications.

- Capacity range 8 - 75 l/h, 10 - 4 bar
- Good suction capacity, smooth dosing stroke and constant, precise dosing
- High process quality through dosing reproducibility of better than  $\pm 2\%$
- Robust construction with powerful motor and glass fibre reinforced housing
- Suitable for many applications through four gear ratios, two sizes of liquid end and two material versions

Vario C								
Pump type	[bar]	on 50 Hz version [l/h]	strokes/min.	on 60 Hz version [psi]	[l/h/gph]	strokes/min.	Suction lift (mWG)	Connector size (ext. Ø x int. Ø mm)
10008	10	8	38	145	9.6/2.5	45	7	3/4" / 10
10016	10	16	77	145	19.2/5.0	92	7	3/4" / 10
07026	7	26	120	100	31.2/8.2	144	7	3/4" / 10
07042	7	42	192	100	50.4/13.3	230	7	3/4" / 10
07012	7	12	38	100	14.4/3.8	45	6	3/4" / 10
07024	7	24	77	100	28.8/7.6	92	6	3/4" / 10
04039	4	40	120	58	48.0/12.6	144	6	3/4" / 10
04063	4	64	192	58	76.8/20.2	230	6	3/4" / 10
Material in contact with chemicals								
Version	Dosing head	Suction/discharge connector	Seals	Ball valves/ Valve seats				
PVT	PVDF (polyvinylidene fluoride)	PVDF	PTFE	Ceramic / PTFE				
SST	Stainless steel 1.4571 / 1.4404	Stainless steel 1.4581	PTFE	Stainless steel 1.4401 / PTFE				

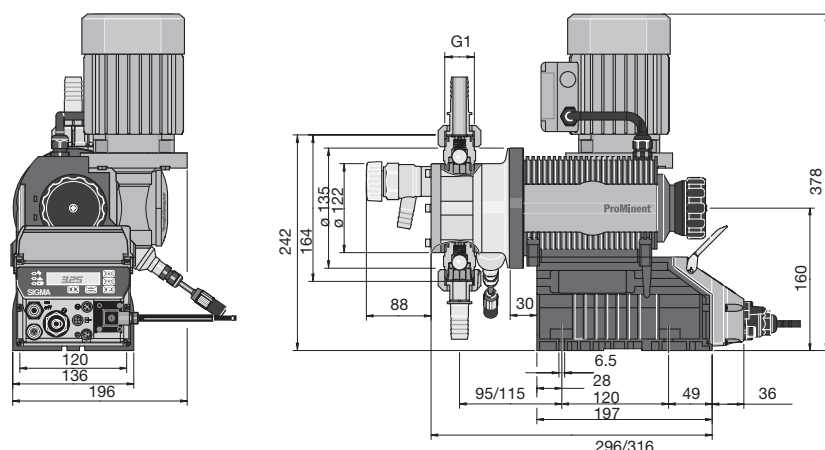
DEVELOPAN® dosing diaphragm with PTFE coating fitted on all versions.



Further information:  
[www.prominent.com/motor\\_pumps](http://www.prominent.com/motor_pumps)

# The right pump for every use

## Sigma/ 1



The Sigma series offers the right capacity for every requirement. Each Sigma pump is available as a basic version or as a microprocessor / control version with internal electronics. The three variants differ in their capacity ranges:

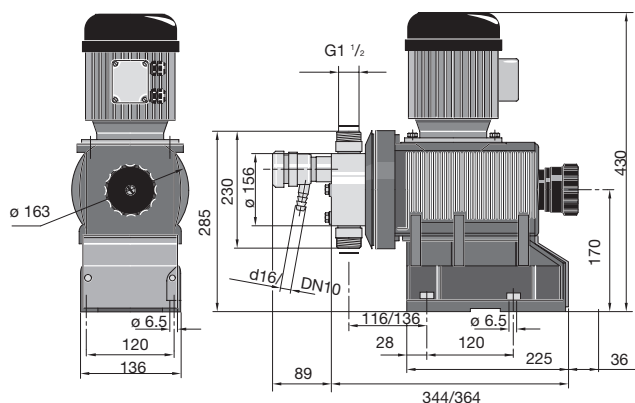
- Sigma/ 1: 17 - 144 l/h, 12 - 4 bar
- Sigma/ 2: 50 - 420 l/h, 16 - 4 bar
- Sigma/ 3: 145 - 1,030 l/h, 12 - 4 bar

Sigma pumps are ideal for simplified spares management – when a number of pumps in the Sigma series are used together. Their key features are:

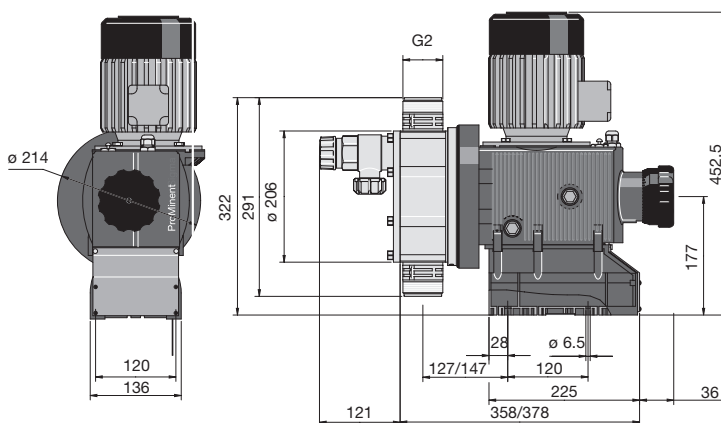
- Process safety through double diaphragm with diaphragm rupture indication
- Integral relief valve protects against overload
- Two versions: basic type and control version
- Simple operation through large plain text display (microprocessor version)
- Straightforward linking to bus-networked systems via PROFIBUS-DP® interface (microprocessor version)
- For volume-proportional, measured value-dependent, time and pulse-controlled dosing

Sigma/ 1								
Pump type S1Ba / S1Ca	[bar]	on 50 Hz version			on 60 Hz version			Connector (thread-DN)
		[l/h]	strokes/min.	[psi]	[l/h/gph]	strokes/min.	Suction lift (mWG)	
12017	12.0	17	73	174	20/5.2	88	7	3/4 - 10
12035	12.0	35	143	174	42/11.1	172	7	3/4 - 10
10050	10.0	50	200	145	60/15.8	240	7	3/4 - 10
10022	10.0	22	73	145	26/6.8	88	6	3/4 - 10
10044	10.0	44	143	145	53/14	172	6	3/4 - 10
07065	7.0	65	200	100	78/20.6	240	6	3/4 - 10
07042	7.0	42	73	100	50/13.2	88	3	1 - 15
04084	4.0	84	143	58	101/26.7	172	3	1 - 15
04120	4.0	120	200	58	144/38	240	3	1 - 15

## Sigma/ 2



## Sigma/ 3



### Sigma/ 2

Pump type	[bar]	at 50 Hz operation [l/h]	strokes/min.	[psi]	at 60 Hz operation [l/h/gph]	strokes/min.	Suction lift (mWG)	Connector (thread-DN)
<b>S2Ba / S2Ca</b>								
16050	10/16*	50	73	145/232	60/15.9	87	7	1 - 15
16090	10/16*	90	132	145/232	108/28.5	156	7	1 - 15
16130	10/16*	130	198	145/232	156/41	232	7	1 - 15
07120	7	120	73	100	144/38	87	5	20 **
07220	7	220	132	100	264/69.7	156	5	20 **
04350	4	350	198	58	420/111	232	5	20 **

\* Note: max permissible pressure 10 bar on PVT material version

\*\* Note: valves in dosing head in DN 25 (1 1/2 thread), hydraulic connector DN 20.

The 60 Hz performance data applies for the Sigma control types (as they operate at 60 Hz internally) but at max. 200 strokes/min.

### Sigma/ 3

Pump type	[bar]	at 50 Hz operation [l/h]	strokes/min.	[psi]	at 60 Hz operation [l/h/gph]	strokes/min.	Suction lift (mWG)	Connector (thread-DN)
<b>S3Ba / S3Ca</b>								
120145	10/12	145	72	145/174	174/46	86	5	1 1/2 - 25
120190	10/12	190	103	145/174	228/60.2	124	5	1 1/2 - 25
120270	10/12	270	144	145/174	324/85.6	173	5	1 1/2 - 25
120330	10/12	330	180	145/174	-	-	5	1 1/2 - 25
070410	7	410	72	100	492/130	86	4	2 - 32
070580	7	580	103	100	696/183.9	124	4	2 - 32
040830	4	830	144	58	1000/264	173	3	2 - 32
041030	4	1030	180	58	-	-	3	2 - 32

### Material in contact with chemicals Sigma/ 1, Sigma/ 2, Sigma/ 3

Version	Liquid end	Suction/discharge connector	Seals	Ball valves (DN 10-25)	Plate/spring (DN 32)	Integral relief valve
<b>PVT</b>	PVDF (polyvinylidene fluoride)	PVDF (polyvinylidene fluoride)	PTFE	Ceramic on DN 10/15 Glass on DN 25	Ceramic/ Hast. C + CTFE	PVDF/FPM*
<b>SST</b>	Stainless steel 1.4404	Stainless steel 1.4581	PTFE	Stainless steel 1.4401	Stainless steel 1.4404/ Hast. C	Stainless steel/FPM*

The 60 Hz performance data applies for the Sigma control types (as they operate at 60 Hz internally) but at max. 200 strokes/min.

\*on 07120, 07220, 04350 \*FPM: Fluoroelastomer



Further information:  
[www.prominent.com/motor\\_pumps](http://www.prominent.com/motor_pumps)

## World-wide contact



ProMinent is at home in more than 100 countries of the world. This guarantees world-wide availability of the products and short distances to the customer. We offer you the same high quality standard in products and services worldwide. For you at your location: experience and know-how in water treatment and chemical fluid handling are available world-wide.

For detailed information, please visit our website [www.prominent.com](http://www.prominent.com)

ProMinent Dosiertechnik GmbH  
Im Schuhmachergewann 5-11  
69123 Heidelberg  
Germany  
Phone: +49 6221 842-0  
Fax: +49 6221 842-419  
[info@prominent.com](mailto:info@prominent.com)  
[www.prominent.com](http://www.prominent.com)

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