

1.2 ProMinent® gamma/ X Metering Pumps

1.2.2 Technical Data & Materials for gamma/ X

pump type gamma/ X	Delivery rate at max. back pressure			Number of Strokes	Connection Size OD x ID	Suction Lift	Shipping Weight	
	bar	l/h	ml/stroke				PP, NP	SS
GMXa 1602	16	2.30	0.19	200	6 x 4	6.0**	3.6	4.1
GMXa 1604	16	3.60	0.30	200	6 x 4	5.0**	3.6	4.1
GMXa 0708	7	7.60	0.63	200	8 x 5	4.0**	3.7	5.0
GMXa 0414	4	13.50	1.13	200	8 x 5	3.0**	3.7	5.0
GMXa 0220	2	19.70	1.64	200	12 x 9	2.0**	3.7	5.0
GMXa 2504	25	3.80	0.32	200	(6x4 suction) 8 x 4***	4.0**	4.9	5.5
GMXa 1009	10	9.00	0.75	200	8 x 5	3.0**	5.1	6.5
GMXa 0715	7	14.50	1.21	200	8 x 5****	3.0**	5.1	6.5
GMXa 0424	4	24.00	2.00	200	12 x 9	3.0**	5.1	6.5
GMXa 0245	2	45.00	3.70	200	12 x 9	2.0**	5.2	7.0

gamma/ X metering pumps with self-bleeding head without bypass (SER) PVT7

GMXa 1602	10	0.90	0.08	200	6 x 4	1.8**	3.6	-
GMXa 1604	10	1.60	0.13	200	6 x 4	1.8**	3.6	-
GMXa 0708	7	5.70	0.48	200	8 x 5	1.8**	3.7	-
GMXa 0414	4	12.00	1.00	200	8 x 5	1.8**	3.7	-
GMXa 0220	2	17.40	1.45	200	12 x 9	1.8**	3.7	-
GMXa 1009	10	6.00	0.50	200	8 x 5	1.8**	5.1	-
GMXa 0715	7	12.90	1.08	200	8 x 5	1.8**	5.1	-
GMXa 0424	4	19.20	1.60	200	12 x 9	1.8**	5.1	-

gamma/ X metering pumps with auto bleed (SEK) NPB9

GMXa 1602	10	1.3	0.11	200	6 x 4	2.1**	3.6	-
GMXa 1604	10	2.4	0.21	200	6 x 4	2.7**	3.6	-
GMXa 0708	7	6.8	0.57	200	8 x 5	2.0**	3.7	-
GMXa 0414	4	12.0	1.00	200	8 x 5	2.0**	3.7	-
GMXa 0220	2	18.0	1.50	200	12 x 9	2.0**	3.7	-
GMXa 1009	10	8.0	0.67	200	8 x 5	3.0**	5.1	-
GMXa 0715	7	13.5	1.12	200	8 x 5	2.5**	5.1	-
GMXa 0424	4	20.0	1.67	200	12 x 9	2.5**	5.1	-

Note: gamma/ X metering pumps with dosing heads for high-viscosity media have a 10 – 20% lower capacity, and are not self priming.

* The given performance data represents guaranteed minimum values, calculated using water as the medium at room temperature.

** Suction lift with a filled dosing head and filled suction line, with a self-bleeding dosing head with air in the suction line.

*** With stainless steel design 6 mm connector width.

**** With stainless steel design 12 mm connector width.

All data refers to water at 20 °C.

Materials in contact with the medium

Dosing head	Suction/pressure	Connector	Ball seat	Seals	Balls
PPT	Polypropylene	Polypropylene	PVDF	PTFE	Ceramic
NPT	Clear acrylic	PVC	PVDF	PTFE	Ceramic
PVT	PVDF	PVDF	PVDF	PTFE	Ceramic
TTT	PTFE with carbon	PTFE with carbon	Ceramic	PTFE	Ceramic
SST	Stainless steel material no. 1.4404	Stainless steel material no. 1.4404	Ceramic	PTFE	Ceramic

Self-bleeding design only in material designs PP and NP with a valve spring made of Hastelloy C and a PVDF valve insert.

Diaphragm with a PTFE coating. FKM = fluorine rubber

Metering reproducibility: ±2% when used according to the operating instructions

Permissible ambient temperature: -10 °C to +45 °C

Mean power consumption: 24/30 W

Degree of protection: IP 65, insulation class F



1.2 ProMinent® gamma/ X Metering Pumps

1.2.3 Identity Code & Pricing for gamma/ X

GMXa	Type	PPT2	NPT2	NPB2	NPB9	PVT0	PVT2	PVT4	PVT7	TTT0	SST0
	1602, 1604					PPT0					
	0708, 0414, 0220					NPT0					
	2504 **										
	1009, 0715, 0424										
	0245										

Liquid end/valve material

PP	Polypropylene/PVDF, with self-bleeding design polypropylene
NP	Clear acrylic/PVDF, with self-bleeding design clear acrylic/PVC
PV	PVDF/PVDF
TT	PTFE/PTFE
SS	Stainless steel 1.4404/1.4404

Note: Pump prices above in **BOLD** are normally stocked. Prices in *italics*, (and other combinations of materials), are available ex PDT Germany. Please consult Sydney office.

Seal/diaphragm material

T	PTFE/PFTE coated
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Liquid end version

- 0 Non-bleed version, no valve spring **only with NP, TT and SS and type 0245**
- 1 Non-bleed version, with valve spring **only with NP, TT and SS and type 0245**
- 2 Bleed function, no valve springs **only with PP, PV, NP * not for type 0245***
- 3 Bleed function, with valve springs **only with PP, PV, NP * not for type 0245***
- 4 HV version for highly viscous media with valve spring *** not for types 1602 and 0245 ***
- 7 self-bleeding without bypass (SER), **only with NPT and PVT* not for types 1602, 2504 and 0245***
- 9 self-bleeding without bypass (SEK), **only with NPB not for types 2504 and 0245 ***

Hydraulic connections

- 0 Standard according to technical data
- 5 Discharge side connection for hose 12/6, suction standard, only PP, NP, PV
- 9 Discharge side connection for hose 10/4, suction standard, only PP, NP, PV

Diaphragm rupture indicator

- 0 Without diaphragm rupture indicator
- 1 With diaphragm rupture indicator, optical sensor, **electrical signal not for 0245**

Version

- 0 Standard

Logo

- 0 with ProMinent® logo

Power supply

- U 100-230V, ±10 %, 50/60 Hz

Cable and plug

- C 2 m Australian

Relay, pre-set to

- 0 No relay
- 1 1 x changeover contact 230V – 2A, fault indicating relay N/C
- 4 2 x N/O 24V – 100 mA, as 1 + pacing relay
- C 1 x N/O 24V – 100 mA, as 1 + 4 – 20 mA output
- F Automatic degassing solenoid 240v - ***
- G Automatic degassing solenoid 24v DC + Relay output

Accessories

- 0 No accessories
- 1 Tube FV & IV - **NOT for PTFE, SS or HV**

Control version

- 0 Manual + ext. 1:1 & pulse control
- 3 Manual + ext. & pulse control + analogue 0/4-20mA
- C such as 3 + CANopen
- D such as 3 + CANopen
- R as 3 + PROFIBUS® DP interface

Metering monitor

- 0 Pulse signal input

Remote Stop

- 0 without Bluetooth
- B with Bluetooth

Language

- EN English

P = Prepack

Note: ** 2504 pump supplied with 2 off 8x4 tube nozzles & clamp rings, & 5.0 m of 8x4 PTFE tube.

Note: Relays type F & G can **ONLY** be fitted to pumps with PPT2, NPT2 and PVT2 Liquid Ends

Note: If PROFIBUS® is specified refer to page 3.20 to determine which PROFIBUS® cables, adaptors and terminators are required. Also if PROFIBUS® option is selected NO relays can be fitted.

Prepacks = P*

P0 - includes 5m of delivery and 2m suction tube a CANbus cable, if specified.

P2 - includes 5m of delivery and 2m suction tube a 2m Control Cable if required.

P5 - as P2 but with 5m control Cable

PX - as P2 but with 10m control Cable

Note: 1602, 1604, pumps are supplied with 5.0m PTFE tube, other tube is available on request.

GMXa 0708 PV T 2 0 1 0 0 U C 0 1 3 0 0 EN P*



1.2 ProMinent® gamma/ X Metering Pumps

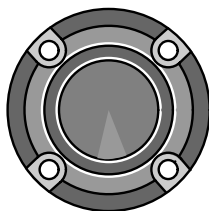
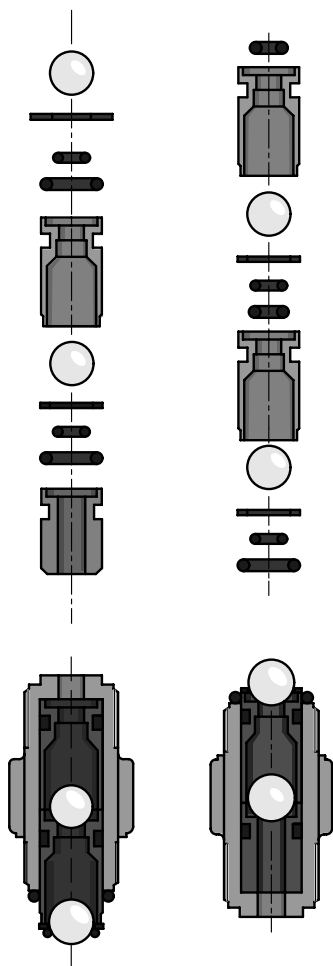
1.2.4 Accessories Spare Part Sets gamma/ X

Spare Parts Kit for gamma/ X

Spare parts kits for gamma/ X, consisting of:

- 1 x diaphragm
- 1 x suction valve, complete
- 1 x discharge valve, complete
- 1 x connector set

Note: Suction and discharge valve set not included with stainless steel version.



Type	Materials in contact with the medium	Part No.
Type 1602	PVT2, PPT, NPT2	1023109
	NBP2	1001723
	NBP9	1001667
	TTT	1001739
	SST	1001731
Type 1604 and Type 2504	PVT2, PPT, NPT2	1035332
	NBP2	1039986
	NBP9	1035334
	PVT4	1035342
	TTT	1035330
Type 0708 and Type 1009	SST	1035331
	PVT2, PPT, NPT2	1023111
	NBP2	1001725
	NBP9	1001669
	PVT4	1019067
Type 0414 and Type 0715	TTT	1001741
	SST	1001733
	PVT2, PPT, NPT2	1023112
	NBP2	1001726
	NBP9	1001670
Type 0220 and Type 0424	PVT4	1019069
	TTT	1001742
	SST	1001734
	PVT2, PPT, NPT2	1051129
	NBP2	1051107
Type 0245	NBP9	1051113
	PVT4	1051134
	TTT	1051151
	SST	1051139
	PVT2, PPT	1051130
Type 0245	NBP2	1051108
	TTT	1051152
	SST	1051140

Spare Diaphragm for Product Range gamma/ X

Type	Materials in contact with the medium	Part No.
Type 1602	all materials	1000246
Type 1604 and Type 2504	all materials	1034612
Type 0708 and Type 1009	all materials	1000248
Type 0414 and Type 0715	all materials	1000249
Type 0220 and Type 0424	all materials	1045456
Type 0245	all materials	1045443



1.2 ProMinent® gamma/ X Metering Pumps

1.2.5 ProMinent® gamma/ X Metering Pumps with SER

Spare parts kits for gamma/ X with self-bleeding Dosing Head without bypass, consisting of:

- 1 x diaphragm
- 1 x suction valve, complete
- 1 x discharge valve, complete
- 1 x bleed valve, complete
- 1 x connector set

Materials in contact

Type	with the medium	Part No.
Type 1602	PVT7, NPT7	1047830
Type 1604	PVT7, NPT7	1047858
Type 0708 and Type 1009	PVT7, NPT7	1047832
Type 0414 and Type 0715	PVT7, NPT7	1047833
Type 0220 and Type 0424	PVT7, NPT7	1051111

1.2.6 PTFE Diaphragm for gamma/X Metering Pumps

NOTE: To be used ONLY with Chlorine Dioxide

Type	with the medium	Part No.
Type 1602		1118690
Type 1604		1117351
Type 0708 and Type 1009		1117350
Type 0414 and Type 0715		1117354
Type 0220 and Type 0424		1117352
Type 0245		1117353

