

# Beta<sup>®</sup> b Series

## Energy efficient and NSF approved

The ProMinent<sup>®</sup> Beta<sup>®</sup> is a microprocessor-based diaphragm solenoid metering pump capable of flows from **0.16 to 8.45 gph (0.59 to 32 l/h)** and pressures to **363 psi (25 bar)**.

Feed rate is determined by stroke length and stroke frequency. Stroke length is adjusted from 0% to 100% with a 10:1 turndown. Stroke frequency is adjusted in 10% increments from 10-100. External contact input for pulse control with a range of 1:64-64:1.

## Applications

- Bleach and other off-gassing fluids
- Water and wastewater treatment
- Automated processes in nearly all industries
- Cooling tower and boiler water treatment
- Low flow chemical feed



## Features & Benefits

- Certified to **NSF/ANSI 61** (acrylic or PVDF liquid ends)
- 50% less power consumption
- External control via adjustable contact pulse signal 1:64-64:1
- Auto-degassing liquid ends ideal for off-gassing chemicals such as bleach
- Capable of handling up to 3000 cps of viscous media such as polymers
- Integral bleed valve eliminates priming issues
- Continual monitoring of chemical supply with optional dual stage level switch
- Adjustable stroke length and stroke frequency
- Fault and pacing relays optional

## Capacity data

Pump Version	Capacity at Max Backpressure			Capacity at 1/2 Max Backpressure			Pre-Primed Suction Lift (m)	Max. Stroking Rate (spm)	Tubing Connectors <sup>2</sup> O.D. x I.D. inches	Shipping Weight (higher weights are for SS)	
	psig (bar)	U.S. GPH (L/h)	mL/stroke	psig (bar)	U.S. GPH (L/h)	mL/stroke				lbs.	(kg)
<b>BT4b</b>											
1000	145 (10)	0.20 (0.74)	0.07	73 (5)	0.22 (0.82)	0.08	19.6 (6)	180	1/4 x 3/16	6.4-7.9	(2.9-3.6)
2001 <sup>3</sup>	290 (20)	0.25 (0.96)	0.10	145 (10)	0.40 (1.50)	0.13	19.6 (6)	180	1/4 x 3/16	6.4-7.9	(2.9-3.6)
1601	232 (16)	0.29 (1.10)	0.10	116 (8)	0.37 (1.40)	0.13	19.6 (6)	180	1/4 x 3/16	6.4-7.9	(2.9-3.6)
2002 <sup>3</sup>	290 (20)	0.45 (1.70)	0.19	145 (10)	0.74 (2.80)	0.24	19.6 (6)	180	1/4 x 3/16	6.4-7.9	(2.9-3.6)
1602	232 (16)	0.58 (2.20)	0.19	116 (8)	0.66 (2.50)	0.24	19.6 (6)	180	1/4 x 3/16	6.4-7.9	(2.9-3.6)
1604	232 (16)	0.95 (3.60)	0.33	116 (8)	1.14 (4.30)	0.40	19.6 (6)	180	1/4 x 3/16	6.8-8.6	(3.1-3.9)
0708	101 (7)	1.88 (7.10)	0.66	50.5 (3.5)	2.22 (8.40)	0.78	19.6 (6)	180	1/2 x 3/8	6.8-8.6	(3.1-3.9)
0413	58 (4)	3.25 (12.30)	1.14	29 (2)	3.75 (14.20)	1.31	9.8 (3)	180	1/2 x 3/8	6.8-8.6	(3.1-3.9)
0220	29 (2)	5.02 (19.00)	1.76	14.5 (1)	5.52 (20.90)	1.94	6.5 (2)	180	1/2 x 3/8	7.3-9.7	(3.3-4.4)
<b>BT5b</b>											
2504 <sup>3</sup>	363 (25)	0.77 (2.90)	0.27	181 (12.5)	0.98 (3.70)	0.34	19.6 (6)	180	(8 x 4mm)	9.9-11.7	(4.5-5.3)
1008	145 (10)	1.80 (6.80)	0.63	73 (5)	2.19 (8.30)	0.76	19.6 (6)	180	1/2 x 3/8	9.9-11.7	(4.5-5.3)
0713	101 (7)	2.91 (11.00)	1.02	50.5 (3.5)	3.46 (13.10)	1.21	13.1 (4)	180	1/2 x 3/8	9.9-11.7	(4.5-5.3)
0420	58 (4)	4.52 (17.10)	1.58	29 (2)	5.05 (19.10)	1.77	9.8 (3)	180	1/2 x 3/8	10.4-12.8	(4.7-5.8)
0232 <sup>1</sup>	29 (2)	8.45 (32.00)	2.96	14.5 (1)	9.56 (36.20)	3.35	6.5 (2)	180	1/2 x 3/8	11.2-14.6	(5.1-6.6)
<b>With auto-degassing liquid ends</b>											
<b>BT4b</b>											
1601	232 (16)	0.16 (0.59)	0.06	116 (8)	0.21 (0.80)	0.07	5.9 (1.8)	180	1/4 x 3/16	6.4	(2.9)
1602	232 (16)	0.37 (1.40)	0.13	116 (8)	0.46 (1.74)	0.174	6.9 (2.1)	180	1/4 x 3/16	6.4	(2.9)
1604	232 (16)	0.71 (2.70)	0.25	116 (8)	0.95 (3.60)	0.33	8.8 (2.7)	180	1/4 x 3/16	6.8	(3.1)
0708	101 (7)	1.74 (6.60)	0.61	50.8 (3.5)	1.98 (7.50)	0.69	6.5 (2.0)	180	1/2 x 3/8	6.8	(3.1)
0413	58 (4)	2.85 (10.80)	1.00	29 (2)	3.33 (12.60)	1.17	6.5 (2.0)	180	1/2 x 3/8	6.8	(3.1)
0220	29 (2)	4.28 (16.20)	1.50	14.5 (1)	4.76 (18.00)	1.67	6.5 (2.0)	180	1/2 x 3/8	7.3	(3.3)
<b>BT5b</b>											
1008	145 (10)	1.66 (6.30)	0.58	73 (5)	1.98 (7.50)	0.69	9.8 (3)	180	1/2 x 3/8	9.9	(4.5)
0713	101 (7)	2.77 (10.50)	0.97	51 (3.5)	3.25 (12.30)	1.14	8.2 (2.5)	180	1/2 x 3/8	9.9	(4.5)
0420	58 (4)	4.12 (15.60)	1.44	29 (2)	4.60 (17.40)	1.61	8.2 (2.5)	180	1/2 x 3/8	10.4	(4.7)

Above capacities and suction lift refer to pumps tested on water at 115 VAC, 60 Hz, and an ambient temperature of 70°F (21°C).

Higher specific gravity fluids will reduce suction lift. Higher viscosity fluids will reduce capacity.

Liquid ends for highly viscous media have 10-20% less metering capacity and are not self-priming. Standard connectors are 1/2" MNPT or 5/8" hose barb. Positive suction recommended.

<sup>1</sup> Not available with bleed valve.

<sup>2</sup> SS versions use 1/4" female threads except models 0220, 0420, and 0232 which use 3/8" female threads.

<sup>3</sup> Only available in SS and Acrylic liquid ends

## Liquid end materials in contact with media

Version	Liquid End	Suction/Discharge valves	Seals	Valve balls	Diaphragm*
*PVT	*PVDF	*PVDF	PTFE	Ceramic	PTFE
PPT	Polypropylene	*PVDF	PTFE	Ceramic	PTFE
NPT	Acrylic	*PVDF	PTFE	Ceramic	PTFE
TTT	PTFE with Carbon	PTFE with Carbon	PTFE	Ceramic	PTFE
SST	316 Stainless Steel	316 Stainless Steel	PTFE	Ceramic	PTFE

\*Highly compatible material suitable for most fluids.

