

# 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. (Optional) External control via a standard 4-20 mA or pulse contact signal.

## Features & Benefits

- Certified to NSF/ANSI 61 (acrylic or PVDF liquid ends)
- Auto-degassing liquid ends for off-gassing chemicals such as bleach & ammonia
- 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
- Standard external control via potential-free contacts with pulse step-up and step-down to adapt to existing signal transducers of 64:1 to 1:64
- (Optional) external control via standard 4-20 mA and potential-free contacts with pulse step-up and step-down of 32:1 to 1:32

## Applications

- Water and wastewater treatment
- Cooling tower and boiler water treatment
- Low flow chemical feed
- Industrial Processes

# Beta<sup>®</sup> b Series

## Technical data

Capacity Data																
Pump Version	Capacity at Maximum Back Pressure				mL/stroke	Capacity at 1/2 Maximum Back Pressure				mL/stroke	Pre-Primed Suction Lift		Max. Stroking Rate spm	Tubing Connectors <sup>2</sup> O.D. x I.D. (in.)	Shipping Weight (approx.)	
	psig	(bar)	GPH	(L/h)		psig	(bar)	GPH	(L/h)		ft.	(m)			lbs.	(kg)
<b>BT4b</b>																
1000	145	(10)	0.2	(0.74)	0.07	73	(5)	0.22	(0.82)	0.08	19.6	(6.0)	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)	0.4	(1.50)	0.13	19.6	(6.0)	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	(6.0)	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	(6.0)	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	(6.0)	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	(6.0)	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	(4)	2.22	(8.40)	0.78	19.6	(6.0)	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	(3.0)	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	(2.0)	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	(13)	0.98	(3.70)	0.34	19.6	(6.0)	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	(6.0)	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	(4)	3.46	(13.10)	1.21	13.1	(4.0)	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	(3.0)	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	(2.0)	180	1/2 x 3/8	11.2-14.6	(5.1-6.6)
<b>BT4b: with auto-degassing liquid ends</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	(4)	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: with auto-degassing liquid ends</b>																
1008	145	(10)	1.66	(6.30)	0.58	73	(5)	1.98	(7.50)	0.69	9.8	(3.0)	180	1/2 x 3/8	9.9	(4.5)
0713	101	(7)	2.60	(10.50)	0.911	51	(4)	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)	4.6	(17.40)	1.61	8.2	(2.5)	180	1/2 x 3/8	10.4	(4.7)
<b>BT4b: with self-bleeding liquid end without bypass</b>																
1602	145	(10)	0.37	(1.40)	0.13	16	(8)	0.45	(1.70)	0.16	5.9	(1.8)	180	1/4 x 3/16	6.3	(2.9)
1604	145	(10)	0.71	(2.70)	0.25	16	(8)	0.95	(3.60)	0.33	5.9	(1.8)	180	1/4 x 3/16	6.8	(3.1)
0708	101	(7)	1.8	(6.60)	0.61	50	(3.5)	2	(7.50)	0.69	5.9	(1.8)	180	1/2 x 3/8	6.8	(3.1)
0413	58	(4)	2.8	(10.80)	1	29	(2)	3.3	(12.60)	1.17	5.9	(1.8)	180	1/2 x 3/8	6.8	(3.1)
0220	29	(2)	4.4	(16.20)	1.5	14.5	(1)	4.7	(18.00)	1.67	5.9	(1.8)	180	1/2 x 3/8	7.2	(3.3)
<b>BT5b: with self-bleeding liquid end without bypass</b>																
1008	145	(10)	1.7	(6.30)	0.58	72	(5)	2	(7.50)	0.69	5.9	(1.8)	180	1/2 x 3/8	9.9	(4.5)
0713	101	(7)	2.8	(10.50)	0.97	50	(4)	3.2	(12.30)	1.14	5.9	(1.8)	180	1/2 x 3/8	9.9	(4.5)
0420	58	(4)	4.1	(15.60)	1.44	29	(2)	4.6	(17.40)	1.61	5.9	(1.8)	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



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