

Identity code: alpha/b metering pumps

Series:
ALPb alpha pump Version b

Pump version: Capacity at Maximum Backpressure (60 Hz power supply) U.S. <table border="1"> <thead> <tr> <th></th> <th>psig</th> <th>(bar)</th> <th>GPH</th> <th>(L/h)</th> </tr> </thead> <tbody> <tr> <td>1001</td> <td>145</td> <td>(10)</td> <td>0.37</td> <td>(1.4)</td> </tr> <tr> <td>0804</td> <td>145</td> <td>(10)</td> <td>0.76</td> <td>(2.9)</td> </tr> <tr> <td>1002</td> <td>145</td> <td>(10)</td> <td>1.11</td> <td>(4.2)</td> </tr> <tr> <td>0808</td> <td>109</td> <td>(7.5)</td> <td>1.32</td> <td>(5)</td> </tr> <tr> <td>1003</td> <td>109</td> <td>(7.5)</td> <td>2.51</td> <td>(9.5)</td> </tr> <tr> <td>0612</td> <td>80</td> <td>(5.5)</td> <td>3.70</td> <td>(14)</td> </tr> <tr> <td>0419</td> <td>58</td> <td>(4)</td> <td>5.68</td> <td>(21.5)</td> </tr> </tbody> </table>			psig	(bar)	GPH	(L/h)	1001	145	(10)	0.37	(1.4)	0804	145	(10)	0.76	(2.9)	1002	145	(10)	1.11	(4.2)	0808	109	(7.5)	1.32	(5)	1003	109	(7.5)	2.51	(9.5)	0612	80	(5.5)	3.70	(14)	0419	58	(4)	5.68	(21.5)
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PP1 Polypropylene with EPDM O-rings w/bleed valve (all versions) PP2 Polypropylene with Viton® O-rings w/bleed valve (versions 0804, 0808, 0612, 0419 only) PP3 Polypropylene with Viton® O-rings w/bleed valve (versions 1001, 1002, 1003 only) NP3 Acrylic/PVC with Viton® O-rings w/bleed valve (versions 1001, 1002, 1003 only) NP6 Acrylic/PVC with Viton® O-rings w/o bleed valve (versions 0804, 0808, 0612, 0419 only)	Liquid end materials: PP1 Polypropylene with EPDM O-rings w/bleed valve (all versions) PP2 Polypropylene with Viton® O-rings w/bleed valve (versions 0804, 0808, 0612, 0419 only) PP3 Polypropylene with Viton® O-rings w/bleed valve (versions 1001, 1002, 1003 only) NP3 Acrylic/PVC with Viton® O-rings w/bleed valve (versions 1001, 1002, 1003 only) NP6 Acrylic/PVC with Viton® O-rings w/o bleed valve (versions 0804, 0808, 0612, 0419 only)	Viton® is a registered trademark of DuPont Dow Elastomers																																							
0 Without springs 1 With 2 springs Hastelloy C (1 psig)	Valve springs: 0 Without springs 1 With 2 springs Hastelloy C (1 psig)																																								
6	Connection: Standard tube fitting for 1/2" x 3/8" tubing																																								
0	Labeling: Standard, with logo																																								
A 230 V 50 Hz Euro plug D 115 V 50/60 Hz N. American plug U 230 V 50/60 Hz N. American plug (6-15 P NEMA configuration)	Electrical connection: with 6 ft. (2 m) power cord single phase A 230 V 50 Hz Euro plug D 115 V 50/60 Hz N. American plug U 230 V 50/60 Hz N. American plug (6-15 P NEMA configuration)																																								
0	Options: Standard																																								

ALPb 1001 PP1 0 6 0 D 0

Specifications: alpha/b

<i>Maximum stroke length:</i>	0.08" (2 mm) for models 1001, 1002, 1003 0.12" (3 mm) for models 0804, 0808, 0612, 0419		
<i>Materials of construction</i>			
<i>Housing:</i>	Glass-filled Luranyl™ (PPE)		
<i>Diaphragm:</i>	PTFE faced EPDM with steel core and Nylon reinforcement		
<i>Liquid end options:</i>	Polypropylene, Acrylic/PVC		
<i>Enclosure rating:</i>	Open Drip Proof (ODP) motor, fan-cooled (use indoors or protected from outdoor elements)		
<i>Motor insulation class:</i>	F		
<i>Power supply:</i>	115 V or 230 VAC, 1 phase, 50/60 Hz (Note: different performance with 50 and 60 Hz power)		
<i>Service factor:</i>	1.10 (100 - 120 VAC or 200 - 240 VAC)		
<i>Motor protection:</i>	Thermal cutout switches motor off at 223°F (106°C), switches pump back on after motor has cooled		
<i>Check valves:</i>	Double ball		
<i>Repeatability of the metering:</i>	When used according to operating instructions, ±5%		
<i>Power cord:</i>	6 foot (2 m)		
<i>Ambient temperature range:</i>	14°F (-10°C) to 113°F (45°C)		
<i>Max. fluid operating temperatures:</i>	<u>Material</u>	<u>Constant</u>	<u>Short Term</u>
	Acrylic/PVC	113°F (45°C)	140°F (60°C)
	Polypropylene	122°F (50°C)	212°F (100°C)
<i>Average power consumption:</i>	115 V 60 Hz, 50 W, 0.9 A 230 V 60 Hz, 45 W, 0.35 A		
<i>Maximum starts/stops:</i>	60 per minute (0.5 sec. on, 0.5 sec. off)		
<i>Warranty:</i>	1 year		
<i>Industry standards:</i>	CSA inspection available at additional cost in U.S., standard in Canada. Electrical safety to DIN VDE 0700 / EN 335.1 / IEC 60335.1 standard		
<i>Valve threads:</i>	NP6 and PP: M20 x 1.5 (provided with adapters to 1/2" x 3/8" tubing)		
<i>Standard Production Test:</i>	100% tested for capacity at maximum pressure		
<i>Max. solids size in fluid:</i>	50μ		

Technical Data: alpha/b

Pump Version	Capacity at Maximum Backpressure					Capacity at 1/2 Maximum Backpressure					Maximum Allowable Starting Backpressure		Stroking Rate at Maximum Pressure spm	Suction/ Discharge Tubing Connectors* O.D. x I.D. inches	Pre- Primed Suction Lift	
	U.S.		mL/			U.S.		mL/			Backpressure psig (bar)	Backpressure psig (bar)			ft.	(m)
	psig	(bar)	GPH	(L/h)	stroke	psig (bar)	GPH	(L/h)	stroke	stroke						
60 Hz power supply																
1001	145	(10)	0.37	(1.4)	0.65	73 (5)	0.42	(1.6)	0.74	145	(10)	36	1/2 x 3/8	19.7	(6)	
1002	145	(10)	0.76	(2.9)	0.70	73 (5)	0.84	(3.2)	0.77	145	(10)	69	1/2 x 3/8	19.7	(6)	
1003	145	(10)	1.11	(4.2)	0.67	73 (5)	1.19	(4.5)	0.71	145	(10)	105	1/2 x 3/8	19.7	(6)	
0804	109	(7.5)	1.32	(5)	2.31	58 (4)	1.42	(5.4)	2.50	109	(7.5)	36	1/2 x 3/8	19.7	(6)	
0808	109	(7.5)	2.51	(9.5)	2.29	58 (4)	2.64	(10)	2.42	109	(7.5)	69	1/2 x 3/8	19.7	(6)	
0612	80	(5.5)	3.70	(14)	2.22	44 (3)	4.02	(15.2)	2.41	51	(3.5)	105	1/2 x 3/8	19.7	(6)	
0419	58	(4)	5.68	(21.5)	2.33	29 (2)	6.21	(23.5)	2.54	36	(2.5)	154	1/2 x 3/8	19.7	(6)	

Above capacities and suction lift refer to electronic pumps tested on water at 115 VAC, 60 Hz, and an ambient temperature of 70°F (20°C). Higher specific gravity fluids will reduce suction lift. Higher viscosity fluids will reduce capacity. Suction pressure is allowable up to 15 psig, less than pump discharge pressure.

50 Hz power supply																
1001	145	(10)	0.32	(1.2)	0.66	73	(5)	0.34	(1.3)	0.72	145	(10)	30	1/2 x 3/8	19.7	(6)
1002	145	(10)	0.63	(2.4)	0.69	73	(5)	0.68	(2.6)	0.75	145	(10)	58	1/2 x 3/8	19.7	(6)
1003	145	(10)	0.92	(3.5)	0.66	73	(5)	1.00	(3.8)	0.72	145	(10)	88	1/2 x 3/8	19.7	(6)
0804	109	(7.5)	1.05	(4)	2.22	58	(4)	1.16	(4.4)	2.44	109	(7.5)	30	1/2 x 3/8	19.7	(6)
0808	109	(7.5)	2.11	(8)	2.30	58	(4)	2.24	(8.5)	2.44	109	(7.5)	58	1/2 x 3/8	19.7	(6)
0612	80	(5.5)	3.17	(12)	2.27	44	(3)	3.35	(12.7)	2.41	51	(5.5)	88	1/2 x 3/8	19.7	(6)
0419	58	(4)	4.89	(18.5)	2.41	29	(2)	5.23	(19.8)	2.58	36	(4)	128	1/2 x 3/8	19.7	(6)

Weight of all alpha/b pumps is 6.6 Lbs. (3 Kg)

Liquid end materials

	Pump head	Suction/Discharge valves	Seals	Valve balls
PP1	Polypropylene with bleed valve	Polypropylene	EPDM	Ceramic
PP2	Polypropylene with bleed valve	Polypropylene	Viton®	Ceramic
PP3	Polypropylene with bleed valve	Polypropylene	Viton®	Ceramic
NP3	Acrylic with bleed valve	PVC	Viton®	Ceramic
NP6	Acrylic without bleed valve	PVC	Viton®	Ceramic

DEVELOPAN® diaphragm, consisting of nylon-reinforced EPDM, steel core, with PTFE facing.

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Dimensions in inches (mm)

