PULSAtron®

SERIES E, A PLUS, AND C PLUS SPECIFICATIONS

GENERAL
Chemical metering pumps shall be positive displacement non-hydraulic, solenoid driven, diaphragm type pumps. Output shall be "hot" rated (at operating temperature) and shall be adjustable while pumps are in operation. Positive flow shall be ensured by a minimum of four ball type check valves. A bleed valve shall be provided for the manual evacuation of entrapped air or vapors and safe relief of pressure in the discharge line.

CONTROLS (standard)
The control panel shall be located opposite the liquid handling end of pump. Output volume adjustments shall be made by independent dial knobs for stroke length and stroke rate.

EXTERNAL PACING (optional for Series C Plus and A Plus)
Pump control shall be selectable between manual and external by means of a 2 position switch. In external mode, the pump shall accept non voltage contact closures (ex: contacting flow meter). As contact closes, the pump shall stroke once, minimum contact closure time is 10 msec. Contact must open and close for each pump stroke. Maximum closures - 125 per minute.

LIQUID LEVEL/STOP FUNCTION (optional for C Plus and A Plus)
A dry contact closure from a liquid level control or external device to the stop function shall cause the pump to halt operation and illuminate a red indicator light on the pump control panel. The pump shall resume normal operation when contact opens.

AGENCY LISTINGS (all models)

SERIES E

Water resistant and available in eight models:
5 and 11 GPD at 250 PSI
6, 12, and 21 GPD at 150 PSI
12, 24, and 44 GPD at 100 PSI
Capable of handling viscosities of up to 10,000 CPS with spring loaded connections.

SERIES C PLUS

Water resistant and available in four models:
6, 12, 22, and 30 GPD at 80 PSI

SERIES A PLUS

Water resistant and available in four models:
6 and 12 GPD at 150 PSI
22 and 30 GPD at 100 PSI

ELECTRONIC DRIVE
To prevent damage to pump from over heating, the solenoid shall have automatic reset thermal overload protection. For overpressure conditions, pump shall automatically stop pulsating when discharge pressure exceeds pump pressure rating by not more than 35% when pump is set at maximum stroke.

The electronic circuitry shall be EMI resistant and shall employ a metal oxide varistor (MOV) for lightning protection. A replaceable fuse mounted on the pump's printed circuit board accessible from inside the pump shall provide circuit overload protection.

Internal wiring between electronic circuit board, solenoid, and power shall be quick disconnect terminals at least 3/16" wide.

ENCLOSURE
Pump drive shall be encased in a water resistant housing constructed of a chemically resistant glass filled polyester. The electronic circuitry shall be mounted at the rear of the pump for maximum protection against chemical intrusion.

MATERIALS OF CONSTRUCTION
Pump Head - GFPPL, PVC, SAN, PVDF, 316SS
Diaphragm - Teflon faced, hypalon backed
Check Valves
- Seats/O-Rings - Teflon, Hypalon, Viton
- Balls - Ceramic, Teflon, 316SS, Alloy C
- Housing - GFPPL, PVC, PVDF, 316SS

Bleed Valve - GFPPL, PVC, PVDF
Tubing - Suction 4 ft. PVC
- Discharge 8 ft. PE

Important: Material Code - GFPPL = Glass-filled Polypropylene, PVC = Polyvinyl Chloride, SAN = Styrene-Acrylonitrile, PE = Polyethylene, PVDF = Polyvinylidene Flouride. Teflon, Hypalon and Viton are registered trademarks of E.I. DuPont Company.

NOTES:

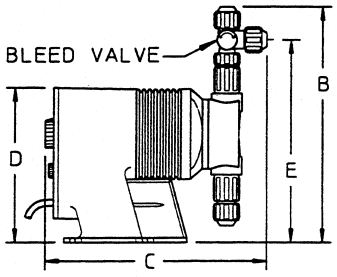
- Pump heads in SAN are not available on pump models rated above 100 PSI.
- Bleed valve not available on pumps configured for high viscosity or NPT connections.
- Tubing may be supplied in PVDF, Polypropylene, or black U.V. inhibited PE.
- **Externally paced models are not available with agency listings.**
- **External pacing is not available on Series E models.**

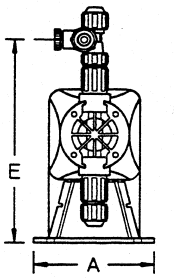
SPECIFICATIONS

MODEL		SERIES E								SERIES A PLUS				SERIES C PLUS			
		LE12	LE02	LE33	LE13	LE03	LE34	LE14	LE44	LB02	LB03	LB04	LB64	LD02	LD03	LD04	LD54
Capacity	GPD	5	6	11	12	12	21	24	44	6	12	22	30	6	12	22	30
nominal	GPH	0.2	0.25	0.45	0.5	0.5	0.87	1	1.83	0.25	0.5	0.91	1.25	0.25	0.5	0.91	1.25
(max.)	LPD	18	22	41	45	45	79	90.8	166	22	44	83	113.5	22	44	83	113.5
Pressure	PSIG	250	150	250	150	100	150	100	100	150	150	100	100	80	80	80	80
(max.)	BAR	17	10	17	10	7	10	7	7	10	10	7	7	5.6	5.6	5.6	5.6
Connections:	Tubing	1/4" ID X 3/8" OD 3/8" ID X 1/2" OD 3/16" ID X 5/16" OD								1/4" ID X 3/8" OD 3/8" ID X 1/2" OD 3/16" ID X 5/16" OD				1/4" ID X 3/8" OD 3/8" ID X 1/2" OD 3/16" ID X 5/16" OD			
	Piping	1/4" FNPT								1/4" FNPT				1/4" FNPT			
Reproducibility at max. capacity		+/- 3%								+/- 3%				+/- 3%			
Viscosity Max CPS		1000 For Viscosity > 1000 see notes								1000				1000			
Stroke Frequency Max SPM		125								125				125			
Stroke Frequency Turn-Down Ratio		10:1								10:1				10:1			
Stroke Length Turn-Down Ratio		10:1								10:1				10:1			
Power Input		115 VAC/50-60 HZ/1 ph 230 VAC/50-60 HZ/1 ph								115 VAC/50-60 HZ/1 ph 230 VAC/50-60 HZ/1 ph				115 VAC/50-60 HZ/1 ph 230 VAC/50-60 HZ/1 ph			
Average Current Draw @ 115 VAC: Amps @ 230 VAC: Amps		0.6 0.3								0.6 0.3				0.6 0.3			
Peak Input Power Watts		130								130				130			
Average Input Power @ max SPM: Watts		50								50				50			

Notes: Viscosity > 1000 < 3000 CPS select connections A or 2 with 316 SS ball.
Viscosity > 3000 CPS requires spring loaded ball checks.
Foot valve and bleed valve not available with High Viscosity (> 3000 CPS) connections.
3/16" ID X 5/16" OD tubing available on models ≤ 12 GPD.

DIMENSIONS:





Series E Dimensions (inches)						
Model No.	A	B	C	D	E	Shipping Weight
LE02	5	9.6	9.6	6.5	8.2	10
LE03	5	9.9	9.5	6.5	8.5	10
LE12	5	9.6	9.6	6.5	8.2	10
LE13	5	9.9	9.5	6.5	8.5	10
LE14	5	9.9	9.5	6.5	8.5	10
LE33	5.4	10.6	11.4	7.5	9.2	15
LE34	5.4	10.6	11.4	7.5	9.2	15
LE44	5.4	10.6	11.4	7.5	9.2	15

Series A Plus Dimensions (inches)						
Model No.	A	B	C	D	E	Shipping Weight
LB02	5	9.6	9.5	6.5	8.2	10
LB03	5	9.9	9.5	6.5	8.5	10
LB04	5	9.9	9.5	6.5	8.5	10
LB64	5	9.9	9.5	6.5	8.5	10

Series C Plus Dimensions (inches)						
Model No.	A	B	C	D	E	Shipping Weight
LD02	5	9.6	9.5	6.5	8.2	10
LD03	5	9.9	9.5	6.5	8.5	10
LD04	5	9.9	9.5	6.5	8.5	10
LD64	5	9.9	9.5	6.5	8.5	10

Note: Inches x 2.54 = cm

PULSAFEEDER®
A Unit of IDEX Corporation

27101 Airport Road, Punta Gorda, FL 33982
Phone: 813-575-3800 Fax: 800-456-4085
813-575-4085

07/98 EMP-041