

# PULSAtron®

## Series E PLUS

## Electronic Metering Pumps



### Key Features

- **Automatic Control**, available with 4-20 mADC direct or external pacing, with stop function.
- **Manual Control** by on-line adjustable stroke rate and stroke length.
- **Auto-Off-Manual** switch.
- **Highly Reliable** timing circuit.
- **Circuit Protection** against voltage and current upsets.
- **Panel Mounted Fuse**.
- **Solenoid Protection** by thermal overload with auto-reset.
- **Water Resistant**, for outdoor and indoor applications.
- **Indicator Lights**, panel mounted.
- **Guided Ball Check Valve Systems**, to reduce back flow and enhance outstanding priming characteristics.
- **Safe & Easy Priming** with durable leak-free bleed valve assembly (standard).

### Complete Economical Selection

Nineteen distinct models are available, having pressure capabilities to 300 PSIG @ 3 GPD, and flow capacities to 504 GPD @ 20PSIG, with a turndown ratio of 100:1. Metering performance is reproducible to within  $\pm 2\%$  of maximum capacity.

Please refer to the reverse side for Series E PLUS specifications.

### Operating Benefits

**Reliable metering performance.** Our guided check valves, with their state-of-the-art seat and ball designs, provide precise seating, and excellent priming and suction lift characteristics. Our timing circuit is highly reliable and, by design, virtually unaffected by temperature, EMI and other electrical disturbances.

**Rated "hot" for continuous duty.** Series E PLUS pumps continue to meet their specifications for pressure and capacity even during extended use. That's because of our high quality solenoid and special enclosure that effectively dissipates heat.

**High viscosity capability.** A straight flow path and ample clearance between the diaphragm and head enable standard PULSAtron pumps to handle viscous chemicals up to a viscosity of 3000 CPS. For higher viscosity applications, larger, spring-loaded connections are available.

### System Compatibility

#### A wide variety of chemicals can be pumped.

Liquid end materials include glass-filled polypropylene (GFPP), PVC, Polyvinylidene Fluoride (PVDF), PTFE, Hypalon, Viton, ceramic, alloys and 316SS.

#### Immediate installation and start-up.

Included as standard accessories with all models are an injection/back pressure valve assembly and a foot valve/strainer assembly\*, including discharge and suction tubing (\*not avail. with high viscosity connections for >3000 CPS).

#### Safe and easy priming and valve maintenance.

Included as a standard accessory is a bleed valve assembly, including return tubing (available only on those models with tubing connections and  $\leq 240$  GPD).

#### Quick and economical liquid end maintenance.

Available for every model is a unique KOPkit®, a convenient, economically priced, package containing new cartridge check valves and other important spare parts.



Agency approved for demanding **OUTDOOR** and indoor applications.

For additional information about PULSAtron's full-featured Series MP refer to Technical Sheet No. EMP-027, about the mid-range Series E, Series D & Series A PLUS refer to Technical Sheet No. EMP-022, EMP-023 & EMP-025. For information about the economical Series C PLUS & Series C, refer to Technical Sheet No. EMP-026 & EMP-024.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



technology  
innovation  
diversity  
excellence

# PULSAtron Series E PLUS Specifications

## Pressure and Flow Rate Capacity

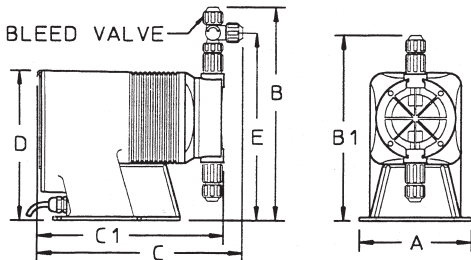
| MODEL                            |  | LPK2                                   | LPB2 | LPA2 | LPD3 | LPB3 | LPA3 | LPK3 | LPF4 | LPD4 | LPB4 | LPH4 | LPG4 | LPE4   | LPK5 | LPH5 | LPH6 | LPK7 | LPH7  | LPJ7  | LPH8  |
|----------------------------------|--|--|------|------|------|------|------|------|------|------|------|------|------|--|------|------|------|------|-------|-------|-------|
| Capacity nominal (max.)          | GPH  | 0.13                                   | 0.21 | 0.25 | 0.5  | 0.50 | 0.50 | 0.60 | 0.85 | 0.90 | 1.00 | 1.70 | 1.75 | 1.85   | 2.50 | 3.15 | 5.00 | 8.00 | 10.00 | 10.00 | 25.00 |
|                                  | GPD  | 3                                      | 5    | 6    | 12   | 12   | 12   | 14   | 20   | 22   | 24   | 41   | 42   | 44   | 60   | 76   | 120  | 192  | 240   | 240   | 600   |
|                                  | LPH  | 0.5                                    | 0.8  | 0.9  | 1.9  | 1.9  | 1.9  | 2.3  | 3.2  | 3.4  | 3.8  | 6.4  | 6.6  | 7  | 9.5  | 11.9 | 18.9 | 30.3 | 37.9  | 37.9  | 94.6  |
| Pressure (max.)                  | PSIG   | 300                                    | 250  | 150  | 250  | 150  | 100  | 100  | 250  | 150  | 100  | 250  | 150  | 100  | 150  | 150  | 100  | 50   | 35    | 80    | 30    |
|                                  | BAR  | 21                                     | 17   | 10   | 17   | 10   | 7    | 7    | 17   | 10   | 7    | 17   | 10   | 7  | 10   | 10   | 7    | 3.3  | 2.4   | 5.5   | 2     |
| Connections                      | Tubing   | 1/4" ID X 3/8" OD<br>3/8" ID X 1/2" OD |      |      |      |      |      |      |      |      |      |      |      | 3/8" ID X 1/2" OD<br>1/2" ID X 3/4" OD (LPH8 ONLY) |      |      |      |      |       |       |       |
|                                  | Piping   | 1/4" FNPT                              |      |      |      |      |      |      |      |      |      |      |      | 1/4" FNPT<br>1/2" FNPT                             |      |      |      |      |       |       |       |
| Reproducibility                  | +/- 2% at maximum capacity   |  |      |      |      |      |      |      |      |      |      |      |      |  |      |      |      |      |       |       |       |
| Viscosity Max CPS                | For viscosity up to 3000 CPS, select connection size 3, 4, B or C with 316SS ball material. Flow rate will determine connection/ball size. Greater than 3000 CPS require spring loaded ball checks. See Selection Guide for proper connection. |  |      |      |      |      |      |      |      |      |      |      |      |  |      |      |      |      |       |       |       |
| Stroke Frequency                 | 125 Strokes Per Minute (SPM) maximum   |  |      |      |      |      |      |      |      |      |      |      |      |  |      |      |      |      |       |       |       |
| Stroke Frequency Turn-Down Ratio | 10:1   |  |      |      |      |      |      |      |      |      |      |      |      |  |      |      |      |      |       |       |       |
| Stroke Length Turn-Down Ratio    | 10:1   |  |      |      |      |      |      |      |      |      |      |      |      |  |      |      |      |      |       |       |       |
| Power Input                      | 115 VAC/50-60 HZ/1 ph<br>230 VAC/50-60 HZ/1 ph   |  |      |      |      |      |      |      |      |      |      |      |      |  |      |      |      |      |       |       |       |
| Average Current Draw             | 1.0 Amps @ 115 VAC, 0.5 Amps @ 230 VAC   |  |      |      |      |      |      |      |      |      |      |      |      |  |      |      |      |      |       |       |       |
| Peak Input Power                 | 300 Watts  |  |      |      |      |      |      |      |      |      |      |      |      |  |      |      |      |      |       |       |       |
| Average Input Power @ max SPM    | 130 Watts  |  |      |      |      |      |      |      |      |      |      |      |      |  |      |      |      |      |       |       |       |

## Liquid End Materials

| Series | Pump Head                      | Diaphragm                    | Check Valves             |                                      | Fittings             | Bleed Valve  | Injection Valve Assembly Foot Valve      | Tubing                |
|--------|--------------------------------|------------------------------|--------------------------|--------------------------------------|----------------------|--|--|-----------------------|
|        |                                |                              | Seats/O rings            | Balls                                |                      |  |  |                       |
| E Plus | GFPPL<br>PVC<br>PVDF<br>316 SS | PTFE-faced<br>Hypalon-backed | PTFE<br>Hypalon<br>Viton | Ceramic<br>PTFE<br>316 SS<br>Alloy C | GFPPL<br>PVC<br>PVDF | Same as fitting and check valve selected, except 316SS | Same as fitting and check valve selected | Clear PVC<br>White PE |

Important: Material Code— GFPPL = Glass-filled Polypropylene, PVC = Polyvinyl Chloride, PE = Polyethylene, PVDF = Polyvinylidene Fluoride. Hypalon and Viton are registered trademarks of E.I. DuPont Company. PVC wetted end recommended for sodium hypochlorite.

## Dimensions



| Series E Plus Dimensions (inches) |     |      |    |      |    |     |     |         |           |     |      |      |      |      |     |      |         |  |
|-----------------------------------|-----|------|----|------|----|-----|-----|---------|-----------|-----|------|------|------|------|-----|------|---------|--|
| Model No.                         | A   | B    | B1 | C    | C1 | D   | E   | Shpg Wt | Model No. | A   | B    | B1   | C    | C1   | D   | E    | Shpg Wt |  |
| LPA2                              | 5.4 | 10.3 | -  | 10.8 | -  | 7.5 | 8.9 | 13      | LPH4      | 6.2 | 10.9 | -    | 11.2 | -    | 8.2 | 9.5  | 21      |  |
| LPA3                              | 5.4 | 10.6 | -  | 10.7 | -  | 7.5 | 9.2 | 13      | LPH5      | 6.2 | 11.3 | -    | 11.2 | -    | 8.2 | 9.9  | 21      |  |
| LPB2                              | 5.4 | 10.3 | -  | 10.8 | -  | 7.5 | 8.9 | 13      | LPH6      | 6.2 | 11.3 | -    | 11.9 | -    | 8.2 | 9.9  | 21      |  |
| LPB3                              | 5.4 | 10.6 | -  | 10.7 | -  | 7.5 | 9.2 | 13      | LPH7      | 6.1 | 11.7 | -    | 11.9 | -    | 8.2 | 10.3 | 21      |  |
| LPB4                              | 5.4 | 10.6 | -  | 10.7 | -  | 7.5 | 9.2 | 13      | LPH8*     | 6.1 | -    | 10.9 | -    | 11.3 | 8.2 | -    | 26      |  |
| LPD3                              | 5.4 | 10.6 | -  | 11.2 | -  | 7.5 | 9.2 | 15      | LPK2      | 5.4 | 10.3 | -    | 10.8 | -    | 7.5 | 8.9  | 13      |  |
| LPD4                              | 5.4 | 10.6 | -  | 11.2 | -  | 7.5 | 9.2 | 15      | LPK3      | 5.4 | 10.6 | -    | 10.7 | -    | 7.5 | 9.2  | 13      |  |
| LPE4                              | 5.4 | 10.6 | -  | 11.2 | -  | 7.5 | 9.2 | 15      | LPK5      | 5.4 | 10.9 | -    | 11.7 | -    | 7.5 | 9.5  | 18      |  |
| LPF4                              | 5.4 | 10.6 | -  | 11.7 | -  | 7.5 | 9.2 | 18      | LPK7      | 6.1 | 11.7 | -    | 11.2 | -    | 8.2 | 10.3 | 21      |  |
| LPG4                              | 5.4 | 10.6 | -  | 11.7 | -  | 7.5 | 9.2 | 18      | LPJ7      | 6.1 | 10   | -    | 10.7 | -    | -   | -    | 21      |  |

NOTE: Inches X 2.54 = cm /\* the LPH8 is designed without a bleed valve available



A Unit of IDEX Corporation

An ISO Certified Company



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Standard Product Operations

27101 Airport Road • Punta Gorda, Florida 33982  
TEL (941) 575-3800 • TEL 800-333-6677  
FAX (941) 575-4085 • FAX 800-456-4085  
spotech@pulsa.com • www.pulsa.com