

Data Sheet

Series E Electronic Metering Pumps

Configuration Data

Model **E74** **1** - **30**

Control & Output Code

Instrument Responsive/Manual Control

Explosion proof electromagnetic metering pumps. UL Listed, meets or exceeds all standards for Division 1 and 2, Class I, Groups C and D; Class II, Groups E, F, and G. Manual adjustment or switch conversion to external control for automatic systems.

E70* --- 1.3 GPH (4.9 V/h) 300 psi (20.7 Bar)

E71* --- 2.5 GPH (9.5 V/h) 150 psi (10.3 Bar)

E72* --- 4.0 GPH (15.1 V/h) 100 psi (6.9 Bar)

E73* --- 8.0 GPH (30 V/h) 60 psi (4.1 Bar)

E74* --- 20 GPH (76 V/h) 25 psi (1.7 Bar)

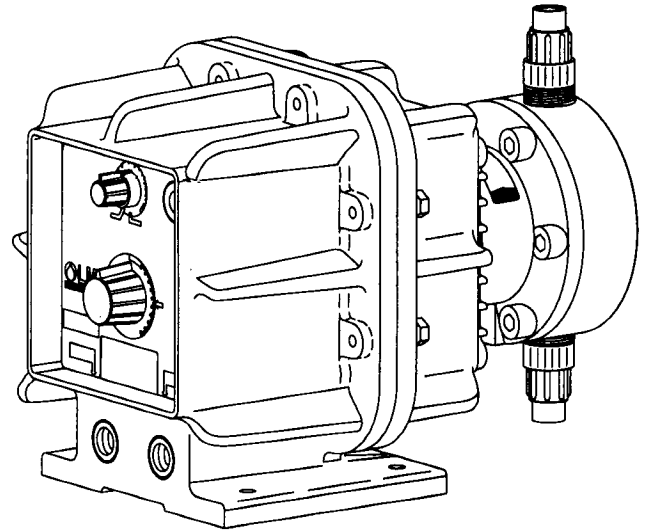
Voltage Code

1 ----- 120 VAC Hardwired

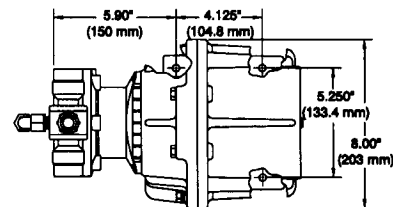
2 ----- 240 VAC Hardwired

Liquid End

See next page for complete liquid end specifications & selection.



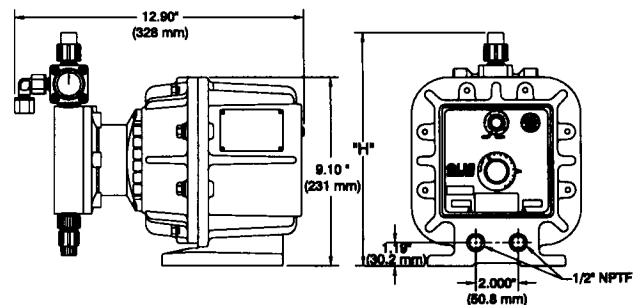
Dimensions



* Dimensions shown are maximums for largest available Liquid End. Dimensions will vary depending on Liquid End selected.

Specifications

| Series | Strokes per Minute (Adjustable) | | Stroke Length (Adjustable) Recommended Minimum | Average Input Power @ Max Speed | Shipping Weight |
|--------|---------------------------------|-----|--|---------------------------------|------------------|
| | Min | Max | | | |
| E70* | | | | | |
| E71* | | | | | |
| E72* | 5 | 100 | 10% | 44 watts | (41 lbs) 18.6 kg |
| E73* | | | | | |
| E74* | | | | | |



Configuration Data and Materials of Construction

| Drive Assembly | Liquid End No. | Size Code | Materials of Construction | | | | Accessory | Tubing & Connections | |
|----------------|----------------|-----------|---------------------------|----------|-------------|-----------|-----------|----------------------|---------|
| | | | Head & Fittings | Balls | Liquifram™ | Seal Ring | | Discharge | Suction |
| E70 □ - | 297 | 0.9 | 316 S.S. | 316 S.S. | Fluorofilm™ | 316 S.S. | | Pipe 1/4" NPT M | |
| | 94 | 0.9 | PVC | Ceramic | Fluorofilm™ | PTFE | | Pipe 1/4" NPT M | |
| | 94S | 0.9 | PVC | Ceramic | Fluorofilm™ | PTFE | 4FV | Pipe 1/4" NPT M | |

| | | | | | | | | | |
|---------|-------|--------------|----------------|-------------|-------------|------------------|----------------------------|------------------|------------------|
| E71 □ - | 361TI | 1.8 | PGC™ / PGC™ | Ceramic | Fluorofilm™ | PGC™ / Polyprel® | 3FV | PE .375" O.D. | |
| | 361SI | 1.8 | PGC™ / PGC™ | Ceramic | Fluorofilm™ | PGC™ / Polyprel® | 4FV | PE .375" O.D. | |
| E72 □ - | 362TI | 1.8 | PVDF / PVDF | Ceramic | Fluorofilm™ | PVDF / Polyprel® | 3FV | PE .375" O.D. | |
| | 362SI | 1.8 | PVDF / PVDF | Ceramic | Fluorofilm™ | PVDF / Polyprel® | 4FV | PE .375" O.D. | |
| | 363TI | 1.8 | PVDF / PVDF | Ceramic | Fluorofilm™ | PVDF / PTFE | 3FV | PE .375" O.D. | |
| | 363SI | 1.8 | PVDF / PVDF | Ceramic | Fluorofilm™ | PVDF / PTFE | 4FV | PE .375" O.D. | |
| | 360TI | 1.8 | Acrylic / PGC™ | Ceramic | Fluorofilm™ | PGC™ / Polyprel® | 3FV | PE .375" O.D. | |
| | 360SI | 1.8 | Acrylic / PGC™ | Ceramic | Fluorofilm™ | PGC™ / Polyprel® | 4FV | PE .375" O.D. | |
| | 277 | 1.8 | 316 S.S. | 316 S.S. | Fluorofilm™ | 316 S.S. | | Pipe 1/4" NPT M | |
| | 71FS | 1.8 | Acrylic / PVDF | PTFE | Hypalon® | Hypalon® | 4FV | PE .5" O.D. | Vinyl .5" O.D. |
| | 71S | 1.8 | Acrylic / PVC | Ceramic | Fluorofilm™ | PTFE | 4FV | PE .5" O.D. | Vinyl .5" O.D. |
| | 71T | 1.8 | Acrylic / PVC | Ceramic | Fluorofilm™ | PTFE | | PE .5" O.D. | Vinyl .5" O.D. |
| | 72S | 1.8 | PVC | Ceramic | Fluorofilm™ | PTFE | 4FV | PE .5" O.D. | |
| | 72T | 1.8 | PVC | Ceramic | Fluorofilm™ | PTFE | | PE .5" O.D. | |
| | 74 | 1.8 | PVC | Ceramic | Fluorofilm™ | PTFE | | Pipe 1/4" NPT M | |
| | 74S | 1.8 | PVC | Ceramic | Fluorofilm™ | PTFE | 4FV | Pipe 1/4" NPT M | |
| | 75HV | 1.8 | Polypropylene | 316 S.S. | Fluorofilm™ | PTFE | | PE .5" O.D. | Vinyl .938" O.D. |
| | 75S | 1.8 | Polypropylene | Ceramic | Fluorofilm™ | PTFE | 4FV | PE .5" O.D. | |
| | 75T | 1.8 | Polypropylene | Ceramic | Fluorofilm™ | PTFE | | PE .5" O.D. | |
| 76 | 1.8 | Acrylic / PP | 316 S.S. | Fluorofilm™ | Hypalon® | | PE .5" O.D. | Vinyl .938" O.D. | |
| 79 | 1.8 | UHMW PE | Ceramic | Hypalon® | Hypalon® | | PE .5" O.D. Vinyl .5" O.D. | | |

| | | | | | | | | | |
|---------|-------|-----|----------------|----------|-------------|------------------|-----|-----------------|------------------|
| E73 □ - | 311TI | 3.0 | PGC™ / PGC™ | Ceramic | Fluorofilm™ | PGC™ / Polyprel® | 3FV | PE .375" O.D. | |
| | 311SI | 3.0 | PGC™ / PGC™ | Ceramic | Fluorofilm™ | PGC™ / Polyprel® | 4FV | PE .375" O.D. | |
| | 312TI | 3.0 | PVDF / PVDF | Ceramic | Fluorofilm™ | PVDF / Polyprel® | 3FV | PE .375" O.D. | |
| | 312SI | 3.0 | PVDF / PVDF | Ceramic | Fluorofilm™ | PVDF / Polyprel® | 4FV | PE .375" O.D. | |
| | 313TI | 3.0 | PVDF / PVDF | Ceramic | Fluorofilm™ | PVDF / PTFE | 3FV | PE .375" O.D. | |
| | 313SI | 3.0 | PVDF / PVDF | Ceramic | Fluorofilm™ | PVDF / PTFE | 4FV | PE .375" O.D. | |
| | 310TI | 3.0 | Acrylic / PGC™ | Ceramic | Fluorofilm™ | PGC™ / Polyprel® | 3FV | PE .375" O.D. | |
| | 310SI | 3.0 | Acrylic / PGC™ | Ceramic | Fluorofilm™ | PGC™ / Polyprel® | 4FV | PE .375" O.D. | |
| | 20HV | 3.0 | Acrylic / PP | 316 S.S. | Fluorofilm™ | Hypalon® | | PE .5" O.D. | Vinyl .938" O.D. |
| | 20 | 3.0 | Acrylic / PVC | Ceramic | Fluorofilm™ | Hypalon® | | PE .5" O.D. | Vinyl .5" O.D. |
| | 20S | 3.0 | Acrylic / PVC | Ceramic | Fluorofilm™ | Hypalon® | 4FV | PE .5" O.D. | Vinyl .5" O.D. |
| | 24 | 3.0 | PVC | Ceramic | Fluorofilm™ | PTFE | | Pipe 1/2" NPT M | |
| | 25HV | 3.0 | Polypropylene | 316 S.S. | Fluorofilm™ | PTFE | | PE .5" O.D. | Vinyl .938" O.D. |
| | 25P | 3.0 | Polypropylene | Ceramic | Fluorofilm™ | PTFE | | Pipe 1/2" NPT M | |
| | 25T | 3.0 | Polypropylene | Ceramic | Fluorofilm™ | PTFE | | PE .5" O.D. | |
| | 26 | 3.0 | PVC | Ceramic | Fluorofilm™ | Viton® | | PE .5" O.D. | |
| | 26S | 3.0 | PVC | Ceramic | Fluorofilm™ | Viton® | 4FV | PE .5" O.D. | |
| | 27 | 3.0 | 316 S.S. | 316 S.S. | Fluorofilm™ | PTFE | | Pipe 1/2" NPT M | |
| | 29 | 3.0 | UHMW PE | Ceramic | Fluorofilm™ | Hypalon® | | PE .5" O.D. | |

| | | | | | | | | | |
|---------|-----|-----|---------------|----------|-----------|------|--|-----------------|----------------|
| E74 □ - | 30 | 6.0 | Acrylic / PVC | Ceramic | PTFE Face | PTFE | | PE .5" O.D. | Vinyl .5" O.D. |
| | 34 | 6.0 | PVC | Ceramic | PTFE Face | PTFE | | Pipe 1/2" NPT M | |
| | 35P | 6.0 | Polypropylene | Ceramic | PTFE Face | PTFE | | Pipe 1/2" NPT M | |
| | 35T | 6.0 | Polypropylene | Ceramic | PTFE Face | PTFE | | PE .5" O.D. | |
| | 37 | 6.0 | 316 S.S. | 316 S.S. | PTFE Face | PTFE | | Pipe 1/2" NPT M | |

□ See front page for voltage code specifications.

3FV Indicates that the pump is equipped with an LMI Three Function Valve (pressure relief, priming aid, line drain).

4FV Indicates that the pump is equipped with an LMI Four Function Valve. This diaphragm type anti-syphon/pressure relief valve is installed on the pump head. It provides anti-syphon protection and aids in priming, even under pressure.

Fluorofilm™ is a copolymer of PTFE and PFA. Polyprel® is an elastomeric PTFE copolymer.

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Output Information

| Series | Gallons per Hour | | Liters per Hour | | mL/cc per Minute | | mL/cc per Stroke | | Maximum Injection Pressure | |
|--------|------------------|------|-----------------|------|------------------|------|------------------|-------|----------------------------|------------|
| | Min | Max | Min | Max | Min | Max | Min | Max | | |
| E70* | 0.007 | 1.3 | 0.025 | 4.9 | 0.41 | 82 | 0.08 | 0.82 | 300 psi | (20.7 Bar) |
| E71* | 0.013 | 2.5 | 0.048 | 9.5 | 0.79 | 158 | 0.16 | 1.58 | 150 psi | (10.3 Bar) |
| E72* | 0.020 | 4.0 | 0.076 | 15.1 | 1.26 | 252 | 0.25 | 2.52 | 100 psi | (6.9 Bar) |
| E73* | 0.040 | 8.0 | 0.151 | 30.0 | 2.52 | 505 | 0.50 | 5.05 | 60 psi | (4.1 Bar) |
| E74* | 0.100 | 20.0 | 0.380 | 76.0 | 6.33 | 1267 | 1.27 | 12.67 | 25 psi | (1.7 Bar) |

* Minimum output can be reduced to zero (0) when in external mode.