

# 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 and CUL 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.

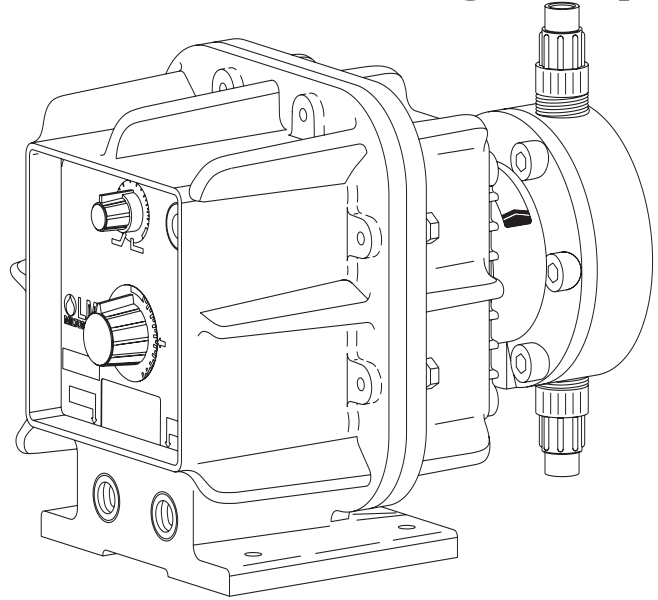
E70\* --- 1.3 GPH (4.9 l/h) .....300 psi (20.7 Bar)  
 E71\* --- 2.5 GPH (9.5 l/h) .....150 psi (10.3 Bar)  
 E72\* --- 4.0 GPH (15.1 l/h) .....100 psi (6.9 Bar)  
 E73\* --- 8.0 GPH (30 l/h) .....60 psi (4.1 Bar)  
 E74\* ---20.0 GPH (76 l/h) .....25 psi (1.7 Bar)

#### Voltage Code

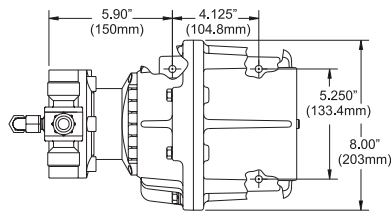
1 ----- 120 VAC Hardwired  
 2 ----- 240 VAC Hardwired

#### Liquid End

See next page for complete liquid end specifications & selection.



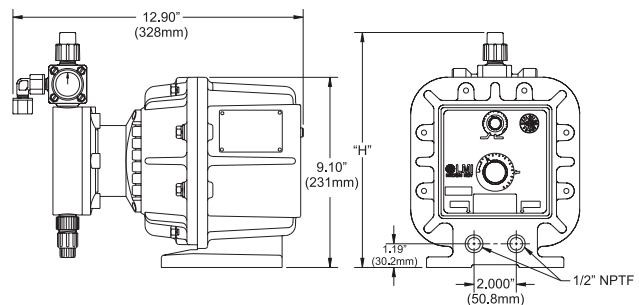
### Dimensions



\* 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*					



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## Standard Liquid End Configuration Data & Materials of Construction

Drive Assembly	Liquid End No.	Size Code	Materials of Construction				Accessory	Tubing & Connections	
			Head & Fittings	Balls	Liquifram™	Check Valve		Discharge	Suction
E70 ■ -	498SP**	0.9	PVC	Ceramic	Fluorofilm™	PVDF / Polyprel®	4FV	Pipe 1/2" NPT M	
	297**	0.9	316 S.S.	316 S.S.	Fluorofilm™	316 S.S.		Pipe 1/4" NPT M	
E71 ■ -	368SI†**	1.8	PVC	Ceramic	Fluorofilm™	PVDF / Polyprel®	4FV	PE .375" O.D.	
	362SI†**	1.8	PVDF / PVDF	Ceramic	Fluorofilm™	PVDF / Polyprel®	4FV	PE .375" O.D.	
E72 ■ -	363SI†**	1.8	PVDF / PVDF	Ceramic	Fluorofilm™	PVDF / PTFE	4FV	PE .375" O.D.	
	460SI†**	1.8	Acrylic / PVC	Ceramic	Fluorofilm™	PVDF / Polyprel®	4FV	PE .375" O.D.	
	465SI†**	1.8	Polypropylene	Ceramic	Fluorofilm™	PVDF / PTFE	4FV	PE .5" O.D.	
	468SI†**	1.8	PVC / PVC	Ceramic	Fluorofilm™	PVDF / Polyprel®	4FV	PE .375" O.D.	
	469SI†**	1.8	Acrylic / PVDF	PTFE	Fluorofilm™	PVDF / Polyprel®	4FV	PE .375" O.D.	
	277**	1.8	316 S.S.	316 S.S.	Fluorofilm™	316 S.S.		Pipe 1/4" NPT M	
	75HV	1.8	Polypropylene	316 S.S.	Fluorofilm™	PTFE		PE .5" O.D. Vinyl .938" O.D.	
	76HV	1.8	Acrylic / PP	316 S.S.	Fluorofilm™	Viton		PE .5" O.D. Vinyl .938" O.D.	
E73 ■ -	312SI#†**	3.0	PVDF / PVDF	Ceramic	Fluorofilm™	PVDF / Polyprel®	4FV	PE .5" O.D.	
	313SI#†**	3.0	PVDF / PVDF	Ceramic	Fluorofilm™	PVDF / PTFE	4FV	PE .5" O.D.	
	318SI#†**	3.0	PVC / PVC	Ceramic	Fluorofilm™	PVDF / Polyprel®	4FV	PE .5" O.D.	
	410SI#†**	3.0	Acrylic / PVC	Ceramic	Fluorofilm™	PVDF / Polyprel®	4FV	PE .5" O.D.	
	418SI#†**	3.0	PVC / PVC	Ceramic	Fluorofilm™	PVDF / Polyprel®	4FV	PE .5" O.D.	
	419SI#†**	3.0	Acrylic / PVDF	PTFE	Fluorofilm™	PVDF / Polyprel®	4FV	PE .5" O.D.	
	20	3.0	Acrylic / PVC	Ceramic	Fluorofilm™	Viton		PE .5" O.D. Vinyl .5" O.D.	
	20HV	3.0	Acrylic / PP	316 S.S.	Fluorofilm™	Viton		PE .5" O.D. Vinyl .938" O.D.	
	20S	3.0	Acrylic / PVC	Ceramic	Fluorofilm™	Viton	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™	Viton		PE .5" O.D.	
	E74 ■ -	30	6.0	Acrylic / PVC	Ceramic	Fluorofilm™	PTFE		PE .5" O.D. Vinyl .5" O.D.
34		6.0	PVC	Ceramic	Fluorofilm™	PTFE		Pipe 1/2" NPT M	
35P		6.0	Polypropylene	Ceramic	Fluorofilm™	PTFE		Pipe 1/2" NPT M	
35T		6.0	Polypropylene	Ceramic	Fluorofilm™	PTFE		PE .5" O.D.	
36		6.0	PVC	Ceramic	Fluorofilm™	PTFE		PE .5" O.D.	
37		6.0	316 S.S.	316 S.S.	Fluorofilm™	PTFE		Pipe 1/2" NPT M	

# - These liquid ends use 3/8" diameter valve balls. Pump output may be reduced in some applications. \*\*Certified to NSF 61

NOTE: 1. Pumps are rated for: Class I, Division I, Groups C & D; Class II, Division I, Groups E, F, and G.

## Output Information

Series	Gallons per Hour		Liters per Hour		mL/cc per Minute		mLcc 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.

## AutoPrime™ Liquid End Configuration Data & Materials of Construction

Drive Assembly	Liquid End No.	Size Code	Head & Fittings	Balls	Liquifram™	Check Valve	Accessory	Tubing & Connections
E71, E72	D60HI**	1.8	Acrylic/PVC	Ceramic	Fluorofilm™	PVDF/Polyprel®	4FV	PE .375" O.D.
	D68HI**	1.8	PVC/PVC	Ceramic	Fluorofilm™	PVDF/Polyprel®	4FV	PE .375" O.D.
E73	D10HI**	3.0	Acrylic/PVC	Ceramic	Fluorofilm™	PVDF/Polyprel®	4FV	PE .5" O.D.
	D18HI**	3.0	PVC/PVC	Ceramic	Fluorofilm™	PVDF/Polyprel®	4FV	PE .5" O.D.

## Output Information – AutoPrime™ Liquid Ends (Liquid end models beginning with “D”)

Series	Maximum Output				Maximum Pressure	
	GPH	Liters/hr	mL/cc per minute	mL/cc per stroke	PSI	Bar
E71	2.3	8.7	145.1	1.45	150 psi	10.3
E72	3.8	14.4	239.8	2.40	100 psi	6.9
E73	7.8	29.5	492.2	4.92	60 psi	4.1

AutoPrime™ liquid ends have 3 check valves: suction on the bottom; discharge on the front; and autoprime bleed on the top. By design, a repeatable portion of the process fluid continuously bleeds through the top check valve to be returned to the chemical supply. The result is the assurance that any gas in the head is automatically relieved thus eliminating air-binding. The maximum output per the tables above is reduced to account for the continuous bleed.

■ See front page for voltage code specifications.

† To specify 1/2" NPT male, change 'I' to 'P'.

To specify black, UV resistant tubing, change 'I' to 'U'.

To specify 3FV, change 'S' to 'T'.

\*\*Certified to NSF 61

**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 priming, even under pressure.

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Polyprel® is an elastomeric PTFE copolymer.

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