

Configuration Data

Model **B92** **1** - **392SI**

Control & Output Code with Standard Liquid End

Manual Control

Speed (stroking frequency) and stroke length manually adjustable.

| | | | | | | | | | | |
|-----|----|-----|-----|-------|------|----|-----|-----|--------|------|
| B11 | -- | 1.6 | GPH | (6.1 | l/h) | -- | 150 | psi | (10.30 | Bar) |
| B12 | -- | 2.5 | GPH | (9.5 | l/h) | -- | 100 | psi | (6.90 | Bar) |
| B13 | -- | 4.5 | GPH | (17.0 | l/h) | -- | 50 | psi | (3.4 | Bar) |
| B14 | -- | 7.0 | GPH | (26.5 | l/h) | -- | 30 | psi | (2.07 | Bar) |

Instrument Responsive/Manual Control

Manual adjustment features of Series B1 plus switch conversion to external control for automatic systems.

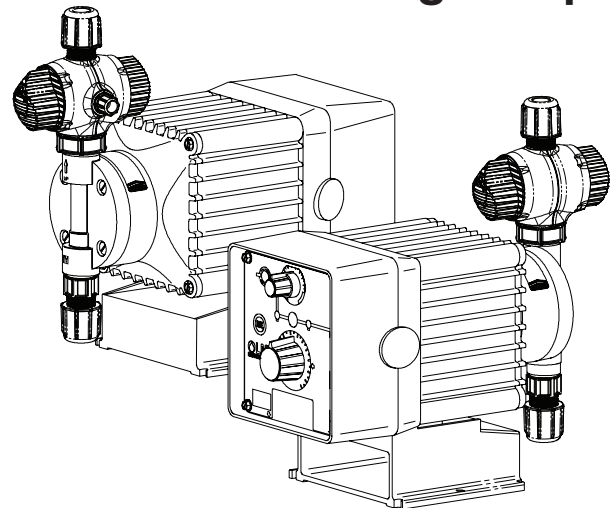
| | | | | | | | | | | |
|-----|----|-----|-----|-------|------|----|-----|-----|--------|------|
| B71 | -- | 1.6 | GPH | (6.1 | l/h) | -- | 150 | psi | (10.30 | Bar) |
| B72 | -- | 2.5 | GPH | (9.5 | l/h) | -- | 100 | psi | (6.90 | Bar) |
| B73 | -- | 4.5 | GPH | (17.0 | l/h) | -- | 50 | psi | (3.4 | Bar) |
| B74 | -- | 7.0 | GPH | (26.5 | l/h) | -- | 30 | psi | (2.07 | Bar) |
| B91 | -- | 1.6 | GPH | (6.1 | l/h) | -- | 150 | psi | (10.30 | Bar) |
| B92 | -- | 2.5 | GPH | (9.5 | l/h) | -- | 100 | psi | (6.90 | Bar) |
| B93 | -- | 4.5 | GPH | (17.0 | l/h) | -- | 50 | psi | (3.4 | Bar) |
| B94 | -- | 7.0 | GPH | (26.5 | l/h) | -- | 30 | psi | (2.07 | Bar) |

Voltage Code

| | | | |
|---|-------|---------|-------------------|
| 1 | ----- | 120 | VAC, US Plug |
| 2 | ----- | 240 | VAC, US Plug |
| 3 | ----- | 220-240 | VAC, DIN Plug |
| 5 | ----- | 240-250 | VAC, UK Plug |
| 6 | ----- | 240-250 | VAC, AUST/NZ Plug |
| 7 | ----- | 220-240 | VAC, SWISS Plug |

Liquid End

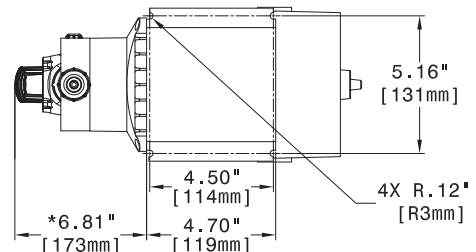
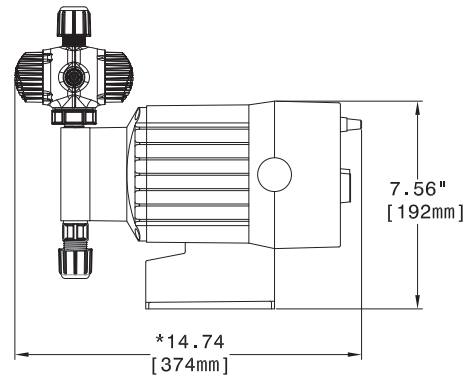
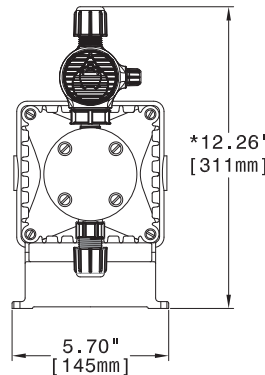
See next page for complete liquid end specifications and selection.



Certified to NSF/ANSI 61 & 372

Certified to NSF/ANSI Standard 50

Dimensions



*Dimensions shown are maximum 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 | | | |
| B11, B71, B91 B12, B72, B92 B13, B73, B93 B14, B74, B94 | 1 | 100 | 10% | 29 watts | 15 lbs (6.9 kg) |



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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 | | |
| B91 ■ - B92 ■ - B71 ■ - B72 ■ - B11 ■ - B12 ■ - | 498SI† | 0.9 | PVC/PVC | Ceramic | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE .375" O.D. |
| | 490SI† | 0.9 | Acrylic/PVC | Ceramic | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE .375" O.D. |
| | 499SI† | 0.9 | Acrylic/PVDF | PTFE | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE .375" O.D. |
| | 398SI† | 0.9 | PVC/PVC | Ceramic | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE .375" O.D. |
| | 393SI† | 0.9 | PVDF/PVDF | Ceramic | Fluorofilm™ | PVDF/PTFE | 4FV | PE .375" O.D. |
| | 392SI† | 0.9 | PVDF/PVDF | Ceramic | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE .375" O.D. |
| | 85HV | 0.9 | Polypropylene | 316 S.S. | Fluorofilm™ | PTFE | | PE .5" O.D. Vinyl .938" O.D. |
| | 86HV | 0.9 | Acrylic/PP | 316 S.S. | Fluorofilm™ | Viton® | | PE .5" O.D. Vinyl .938" O.D. |
| | 495SI† | 0.9 | Polypropylene | Ceramic | Fluorofilm™ | PTFE | 4FV | PE .375" O.D. |
| 297 | 0.9 | 316 S.S. | 316 S.S. | Fluorofilm™ | 316 S.S. | | Pipe 1/4" NPT M | |
| B93 ■ - B73 ■ - B13 ■ - | 468SI† | 1.8 | PVC/PVC | Ceramic | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE .375" O.D. |
| | 460SI† | 1.8 | Acrylic/PVC | Ceramic | Fluorofilm™ | PVC/Polyprel® | 4FV | PE .375" O.D. |
| | 469SI† | 1.8 | Acrylic/PVDF | PTFE | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE .375" O.D. |
| | 368SI† | 1.8 | PVC/PVC | Ceramic | Fluorofilm™ | PVC/Polyprel® | 4FV | PE .375" O.D. |
| | 363SI† | 1.8 | PVDF/PVDF | Ceramic | Fluorofilm™ | PVDF/PTFE | 4FV | PE .375" O.D. |
| | 362SI† | 1.8 | PVDF/PVDF | Ceramic | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE .375" O.D. |
| | 465SI† | 1.8 | Polypropylene | Ceramic | Fluorofilm™ | PTFE | 4FV | PE .375" O.D. |
| | 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. |
| 277 | 1.8 | 316 S.S. | 316 S.S. | Fluorofilm™ | 316 S.S. | | Pipe 1/4" NPT M | |
| B94 ■ - B74 ■ - B14 ■ - | 312SI#† | 3.0 | PVDF/PVDF | .375 Ceramic | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE .5" O.D. |
| | 313SI#† | 3.0 | PVDF/PVDF | .375 Ceramic | Fluorofilm™ | PVDF/PTFE | 4FV | PE .5" O.D. |
| | 318SI#† | 3.0 | PVC/PVC | .375 Ceramic | Fluorofilm™ | PVC/Polyprel® | 4FV | PE .5" O.D. |
| | 410SI#† | 3.0 | Acrylic/PVC | .375 Ceramic | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE .5" O.D. |
| | 415SI#† | 3.0 | Polypropylene | Ceramic | Fluorofilm™ | PTFE | 4FV | PE .5" O.D. |
| | 418SI#† | 3.0 | PVC/PVC | .375 Ceramic | Fluorofilm™ | PVC/Polyprel® | 4FV | PE .5" O.D. |
| | 419SI#† | 3.0 | Acrylic/PVDF | .375 PTFE | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE .5" O.D. |
| | 217 | 3.0 | 316 S.S. | 316 S.S. | Fluorofilm™ | 316 S.S. | | Pipe 1/4" NPT M |

#These liquid ends use 3/8" diameter valve balls. Pump output may be reduced in some applications. Size 3.0 liquid ends use the accessory type AutoPrime valve.

Output Information with Standard Liquid End

| 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 | |
| B11, B71, B91 | 0.002 | 1.6 | 0.006 | 6.1 | 0.10 | 101 | 0.10 | 1.01 | 150 psi (10.30 Bar) |
| B12, B72, B92 | 0.003 | 2.5 | 0.009 | 9.5 | 0.16 | 158 | 0.16 | 1.58 | 100 psi (6.90 Bar) |
| B13, B73, B93 | 0.005 | 4.5 | 0.017 | 17.0 | 0.28 | 284 | 0.28 | 2.84 | 50 psi (3.4 Bar) |
| B14, B74, B94 | 0.007 | 7.0 | 0.027 | 26.5 | 0.44 | 442 | 0.44 | 4.42 | 30 psi (2.07 Bar) |

*Minimum output is based on 1 stroke per minute and 10% stroke setting, minimum output can be reduced further in external mode. Series B9 pumps may be programmed for strokes per hour for lower outputs.

AutoPrime™ 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 | | |
| B92, B91, B72 B71, B12, B11 | D90HI | 0.9 | Acrylic/PVC | Ceramic | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE 0.375" O.D. |
| | D98HI | 0.9 | PVC/PVC | Ceramic | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE 0.375" O.D. |
| B93, B73, B13 | D60HI | 1.8 | Acrylic/PVC | Ceramic | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE 0.375" O.D. |
| | D68HI | 1.8 | PVC/PVC | Ceramic | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE 0.375" O.D. |
| B94, B74, B14 | D10HI | 3.0 | Acrylic/PVC | Ceramic | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE 0.5" O.D. |
| | D18HI | 3.0 | PVC/PVC | Ceramic | Fluorofilm™ | PVDF/Polyprel® | 4FV | PE 0.5" 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 |
| B11, B71, B91 | 1.4 | 5.3 | 88.3 | 0.88 | 150 psi | 10.3 |
| B12, B72, B92 | 2.3 | 8.7 | 145.1 | 1.45 | 100 psi | 6.9 |
| B13, B73, B93 | 4.0 | 15.1 | 252.4 | 2.52 | 50 psi | 3.4 |
| B14, B74, B94 | 6.8 | 25.7 | 429.1 | 4.29 | 30 psi | 2.07 |

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.

Plastic heads with tubing connection include 1/2" NPT and 1/2" BSP.

† To specify 1/4" NPT male, change 'I' to 'P'.

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

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

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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