

# Hi-Draw Injector

**FEATURES****Hi-Draw Downstream Chemical Injector - Stainless Steel**

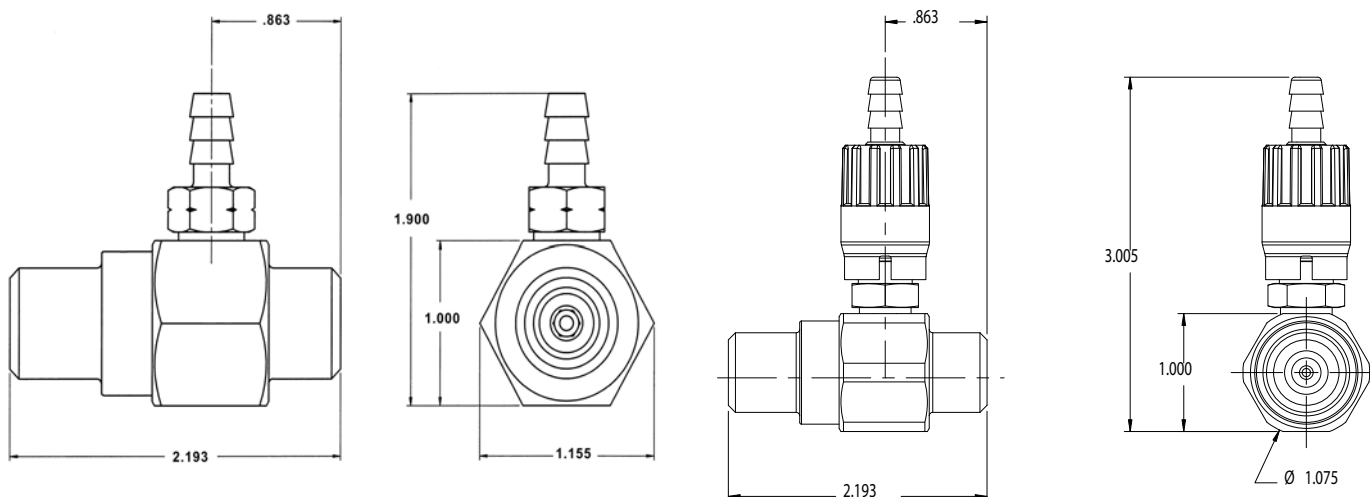
- Up to a 20% injection draw rate\*
- Available with both fixed and adjustable barbs
- Made in the USA
- A cost effective solution to your chemical application needs



\*Draw rates can be affected by factors such as pressure, flow rate, length of discharge hose, and chemical viscosity.

**SPECIFICATIONS**

| Model               | 100873                                                                      | 100874    | 100875    | 100861                                                                      | 100862    | 100863    |
|---------------------|-----------------------------------------------------------------------------|-----------|-----------|-----------------------------------------------------------------------------|-----------|-----------|
| Style               | Fixed                                                                       |           |           | Adjustable                                                                  |           |           |
| Operating Pressure  | 5500 PSI                                                                    |           |           | 5500 PSI                                                                    |           |           |
| Flow Range          | 2 - 3 GPM                                                                   | 3 - 5 GPM | 5 - 8 GPM | 2 - 3 GPM                                                                   | 3 - 5 GPM | 5 - 8 GPM |
| Maximum Temperature | 190° F                                                                      |           |           |                                                                             |           |           |
| Port Sizes          | Inlet: 3/8" NPT-M<br>Discharge: 3/8" NPT-M<br>Chemical Port: 1/4" Hose Barb |           |           | Inlet: 3/8" NPT-M<br>Discharge: 3/8" NPT-M<br>Chemical Port: 1/4" Hose Barb |           |           |
| Dimensions          | 2.2 x 1.15 x 1.9                                                            |           |           | 2.2 x 1.07 x 3.0                                                            |           |           |
| Weight              | .2 lb.                                                                      |           |           | .2 lb.                                                                      |           |           |
| Materials           | Stainless Steel, Viton                                                      |           |           | Stainless Steel, Viton                                                      |           |           |

**DIMENSIONS (INCHES)**

General Pump  
is a member of  
the Interpump Group

Ref. 300536 Rev. B  
07-13



# Hi-Draw Injector

**GENERAL PUMP** *A member of the Interpump Group*

## INSTALLATION

This product is to be used with clean, fresh water. For different or corrosive liquids, contact GP Technical Service Department. With not clean liquids, appropriate filtration should be installed. Select the injector based on the nominal operating rating: system rated pressure, max flow and max temperature. Install valve with direction arrow pointing downstream. For proper operation a control device such as a dual lance wand, quick couple nozzles, or an adjustable nozzle holder must be used to lower the system pressure at the nozzle.

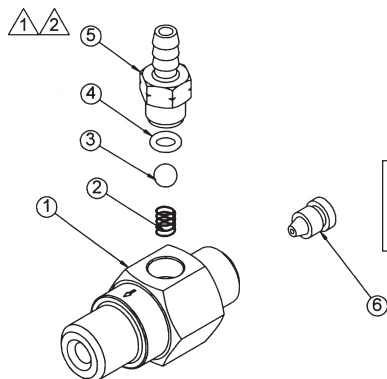
Under no circumstances should the pressure of the system exceed the maximum rated pressure of any component.

## TROUBLESHOOTING

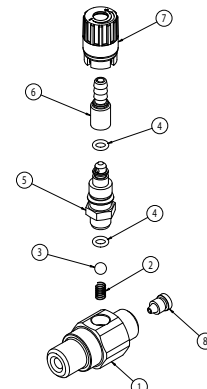
| Problem                                          | Cause                                                | Solution                                                                       |
|--------------------------------------------------|------------------------------------------------------|--------------------------------------------------------------------------------|
| Chemical Injector will not draw chemical         | Incorrect nozzle                                     | Check and change nozzle                                                        |
|                                                  | System is not in low pressure mode                   | Change or adjust nozzle to put system in low pressure mode                     |
|                                                  | Discharge hose is too long                           | Reduce length of discharge hose or change injector*                            |
| Rate of draw seems too slow                      | Chemical line is clogged                             | Clear chemical line of obstruction                                             |
|                                                  | Discharge hose is too long                           | Reduce length of discharge hose or change injector*                            |
|                                                  | Air leak in chemical line<br>Chemical is too viscous | Locate and repair leak<br>Reduce chemical with water to decrease its viscosity |
| Chemical injector is leaking from hose barb      | Obstruction in hose barb checkvalve                  | Disassemble and remove obstruction                                             |
|                                                  | Damaged o-ring in checkvalve                         | Remove and replace o-ring                                                      |
| Excessive pressure load on pump, motor or engine | Clogged injector                                     | Clear injector orifice of obstruction                                          |
|                                                  | Improperly sized injector orifice                    | Change orifice*                                                                |

\*Contact GP Technical Service for Assistance

## PARTS LIST



| Item  | Part Number | Description                        | Qty |
|-------|-------------|------------------------------------|-----|
| Kit * | 100803      | Repair Kit                         | 1   |
| Kit † | 100804      | Acid Kit (Optional)                | 1   |
| 1     | 510340      | Housing, Injector, SS              | 1   |
| 2 *†  | 720049      | Spring                             | 1   |
| 3 *   | 520167      | Ball, Injector, 316 SS             | 1   |
| †     | 640065      | Ball, Injector, Ceramic (optional) | 1   |
| 4 *†  | 701501      | O-ring, 70 duro, Viton, .208x .070 | 1   |
| 5     | 520181      | Hose Barb, SS                      | 1   |
| 6     | 520116      | Nozzle, .070", 303 SS (100873)     | 1   |
|       | 520066      | Nozzle, .083", 303 SS (100874)     | 1   |
|       | 520127      | Nozzle, .091", 303 SS (100875)     | 1   |



| Item  | Part Number | Description                        | Qty |
|-------|-------------|------------------------------------|-----|
| Kit * | 100816      | Repair Kit                         | 1   |
| Kit † | 100817      | Acid Kit (Optional)                | 1   |
| 1     | 520180      | Housing, Injector, SS              | 1   |
| 2 *†  | 720049      | Spring                             | 1   |
| 3 *   | 520167      | Ball, Injector, 316 SS             | 1   |
| †     | 640065      | Ball, Injector, Ceramic (optional) | 1   |
| 4 *†  | 701501      | O-ring, 70 duro, Viton, .208x .070 | 2   |
| 5     | 520178      | Post, Adj. Hi-Draw, SS             | 1   |
| 6     | 520177      | Hose Barb, SS                      | 1   |
| 7     | 660166      | Knob, Adj. Hose Barb               | 1   |
| 8     | 520116      | Nozzle, .070", 303SS (100861)      | 1   |
|       | 520066      | Nozzle, .083", 303 SS (100862)     | 1   |
|       | 520065      | Nozzle, .086", 303 SS (100863)     | 1   |

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