

## NEWTRY B083PRS5L2

# NEWTRY 0.4%-4% Water Powered Fertilizer Injector (Model: B083PRS5L2) - Instruction Manual

Your guide to efficient and precise fertilization for drip irrigation systems.

## INTRODUCTION

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This manual provides detailed instructions for the proper installation, operation, and maintenance of your NEWTRY 0.4%-4% Water Powered Fertilizer Injector. Designed for precision and ease of use, this dosing pump ensures consistent nutrient delivery for various applications without requiring electricity.

## PRODUCT OVERVIEW

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The NEWTRY Fertilizer Injector is a water-powered dosing pump designed for accurate and effective mixing of liquid solutions into a water line. It operates on volumetric proportioning, maintaining a consistent mixture ratio regardless of variations in water pressure or flow. This system is ideal for applications requiring precise dilution.



Figure 1: NEWTRY 0.4%-4% Fertilizer Injector. This image displays the main unit of the fertilizer injector.

## Working Principle

The injector operates by using water flow to power an internal piston. As water enters the doser body, it drives the piston,

which in turn pulls concentrate from a separate container. The concentrate then mixes with the incoming water, and the blended solution is discharged into the main water line. This volumetric proportioning ensures a consistent and accurate dilution ratio.

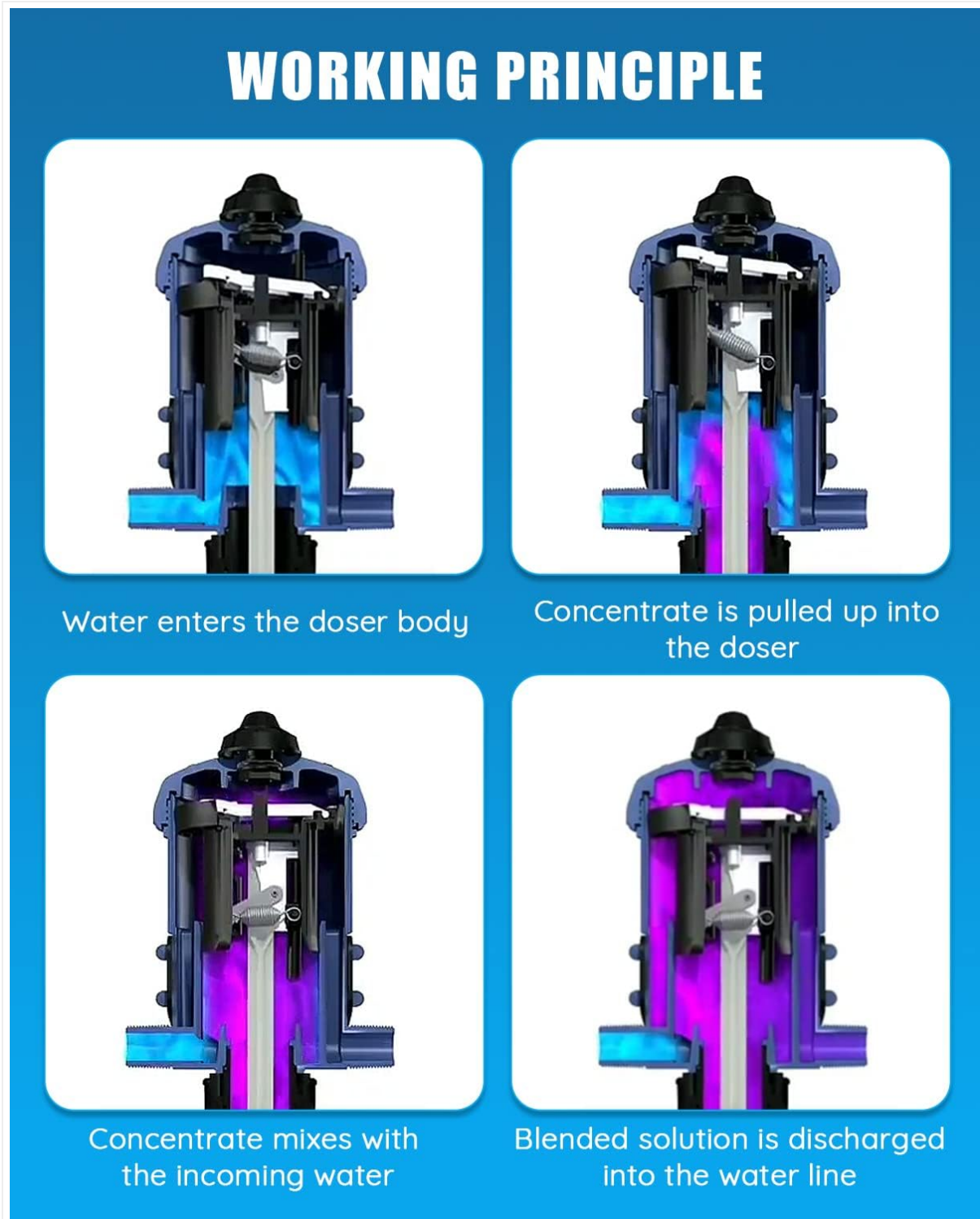


Figure 2: Working Principle Diagram. This diagram illustrates how water enters the doser, pulls concentrate, mixes, and discharges the blended solution.

## SPECIFICATIONS

Feature	Detail
Brand	NEWTRY
Percentage Range	0.4% to 4%

Ratio Range	1:250 to 1:25
Flow Rate	0.09 to 11 GPM (2500 Liters Per Hour Max)
Pressure	4.35 to 87 PSI
Connection Size	3/4" NPT
Power Source	Water Powered
Material	Acrylonitrile Butadiene Styrene (ABS)
Item Weight	4.79 pounds (2.18 Kilograms)
Product Dimensions	19.69 x 7.09 x 5.91 inches

## SETUP AND INSTALLATION

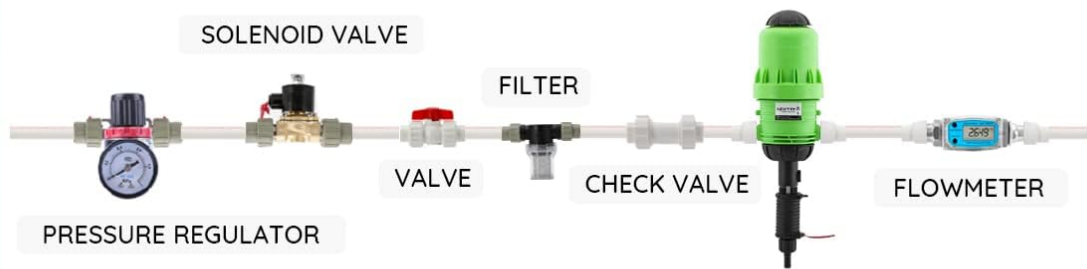
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Proper installation is crucial for the optimal performance of your fertilizer injector. Ensure all connections are secure and follow the recommended setup diagrams.

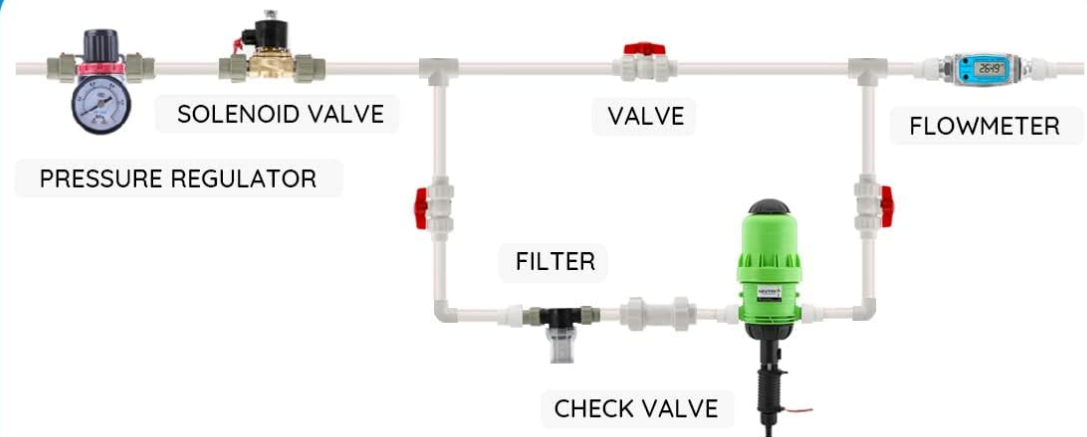
### General Installation Guidelines:

- The water inlet and outlet of the fertilizer injector must be consistent with the water flow direction of the main pipeline.
- Install a filter at the front section of the water inlet to prevent debris from entering the injector.
- A check valve (one-way valve) must be installed at the front section of the water inlet to avoid polluting the water source.
- Ensure the pH of the solution used is within the range of 5-9.

# INSTALLATION DIAGRAM



## STANDARD INSTALLATION



## BYPASS INSTALLATION

The check valve (one-way valve) must be installed at the front section of the water inlet to avoid polluting the water source

Figure 3: Installation Diagram. This image shows both standard and bypass installation methods for the fertilizer injector, highlighting the placement of valves, filters, and check valves.

# OTHER INSTALLATION METHODS

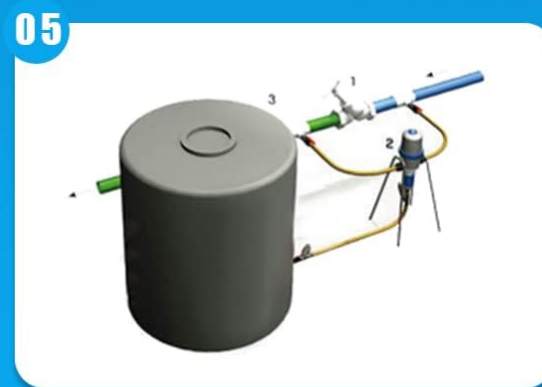
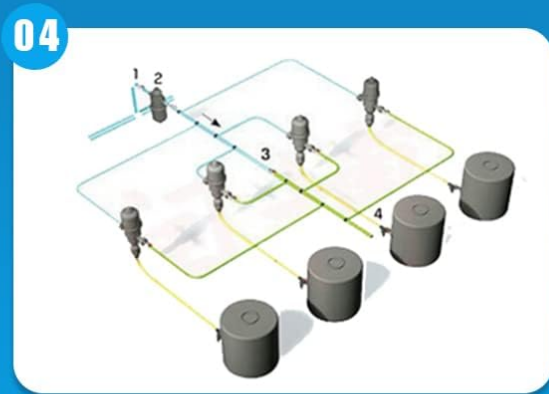
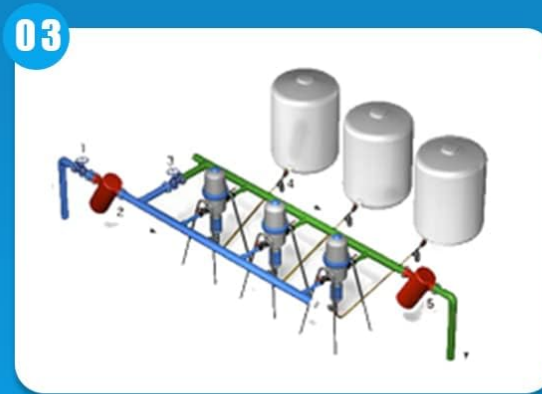
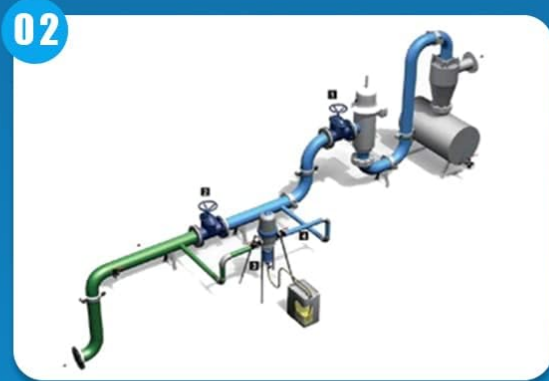
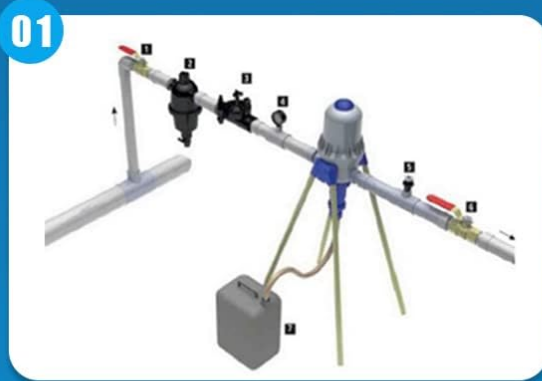


Figure 4: Other Installation Methods. This image provides visual examples of different ways the fertilizer injector can be integrated into various systems.

## Connection Details:



Figure 5: Product Details - Connection Size. A close-up view of the injector's 3/4" NPT connection point.

### Setup Videos:

Video 1: Connect NEWTRY Fertilizer Injector to Drip Irrigation. This video demonstrates the process of connecting the fertilizer injector to a drip irrigation system.

Video 2: NEWTRY Fertilizer Injector Setup Tutorial - Easy Install. A step-by-step tutorial on how to easily set up and install the NEWTRY fertilizer injector.

### OPERATING INSTRUCTIONS

The NEWTRY Fertilizer Injector is designed for simple and convenient operation. Follow these steps to ensure proper function and accurate dosing.

### Adjusting the Dosing Ratio:

The injector features a clear and accurate scale for adjusting the percentage of concentrate to be mixed with water. The percentage range is 0.4% to 4%, corresponding to a ratio range of 1:250 to 1:25.



Figure 6: Product Details - Clear & Accurate Scale. This image highlights the scale used to set the desired dilution ratio.

### Using Accessories:

# PRODUCT DETAILS



**CLEAR & ACCURATE  
SCALE**



**CONNECTION SIZE  
3/4" NPT**



Figure 7: Use of Accessories. This image displays the included accessories like the wrench, fixing base, spring, rubber tube, and sealing rings, which are essential for installation and maintenance.

## Operation Videos:

Video 3: Mastering the Use of NEWTRY Fertilizer Injectors. This video provides comprehensive guidance on effectively using the NEWTRY fertilizer injector for various applications.

Video 4: NEWTRY Fertilizer Injector Overview. An overview of the NEWTRY fertilizer injector, detailing its features and basic operation.

Video 5: NEWTRY fertilizer injector, a good helper in your garden. This video showcases the practical benefits and ease of use of the fertilizer injector in a garden setting.

Video 6: NEWTRY Fertilizer Injector. A brief demonstration of the NEWTRY fertilizer injector in action.

## MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your NEWTRY Fertilizer Injector. Always clean the unit thoroughly after each use, especially when using different solutions, to prevent residue buildup.

## Maintenance Video:

Video 7: Troubleshooting & Routine Maintenance. This video covers essential routine maintenance procedures and common troubleshooting tips for the fertilizer injector.

## TROUBLESHOOTING

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If you encounter issues with your fertilizer injector, refer to the following common problems and solutions:

- **No Injection:** Ensure the water supply is on and flowing. Check that the suction tube is fully submerged in the concentrate and not drawing air. Verify the dosing ratio is correctly set.
- **Inconsistent Dosing:** Check for air leaks in the suction line or around connections. Ensure the concentrate is well-mixed and free of particles that could clog the system.
- **Water Leakage:** Inspect all connections for tightness. Check O-rings and seals for wear or damage and replace if necessary.
- **Reduced Water Flow:** This is normal when the injector is operating, as it uses water pressure to function. If the reduction is excessive, check for blockages in the filter or the main water line.

For more detailed troubleshooting, please refer to the maintenance video above or contact customer support.

## TYPICAL APPLICATIONS

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The NEWTRY Fertilizer Injector is versatile and can be used in a wide range of applications requiring precise dilution:

- **Irrigation:** For delivering fertilizers and nutrients to plants in gardens, farms, and greenhouses.
- **Animal Health:** For administering medications or supplements through drinking water for livestock.
- **Food Safety & Sanitation:** For precise dilution of cleaning and sanitizing agents.
- **Metal Processing:** For controlled mixing of solutions in industrial processes.
- **Nutrient Delivery Systems:** For hydroponic and other advanced growing systems.
- **Vehicle Wash:** For accurate mixing of soaps and waxes in car wash systems.
- **Water Treatment:** For dosing chemicals in water purification processes.

# USE EFFECT DISPLAY

**FERTILIZE**



**DILUTION SOLUTIONS**



**VEHICLE WASH**



**METAL PROCESSING**



**IRRIGATION**



**PRINTING**



Figure 8: Use Effect Display. This image showcases the fertilizer injector being used in diverse settings, including agricultural fertilization, industrial dilution, and vehicle washing.



Figure 9: Nutrient Delivery System. This image illustrates the injector's role in providing precise nutrient mixes for various growing operations.



Figure 10: Irrigation. This image highlights the use of fertilizer injectors in irrigation systems for efficient nutrient delivery to plants.



Figure 11: Car Wash. This image demonstrates the application of the injector in car wash settings for accurate chemical dilution.

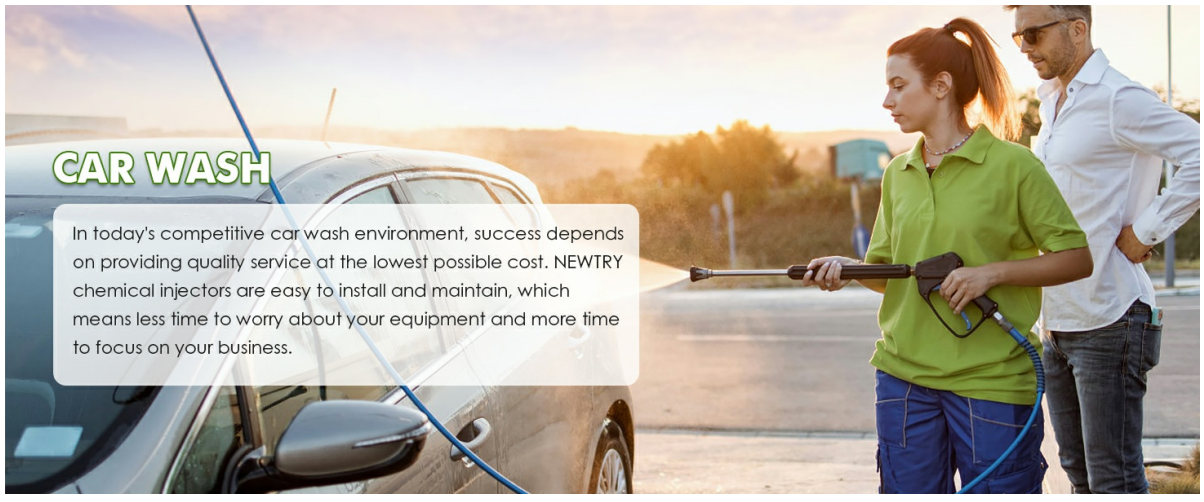


Figure 12: Animal Health. This image shows the use of water-powered medicators for accurate medication delivery in agricultural settings.

## DILUTION RATIO CHART

Use the following chart to determine the appropriate amount of mother liquid (concentrate) needed for various water volumes to achieve desired dilution ratios.



Figure 13: Dilution Chart. This chart provides a guide for mixing mother liquid with water to achieve specific dilution ratios.

## WARRANTY AND SUPPORT

For warranty information, technical support, or any inquiries regarding your NEWTRY Fertilizer Injector, please contact the manufacturer directly. Refer to the product packaging or the NEWTRY official website for contact details.