Turn off the fertilizer when you turn off the seed and save money by using Nozzle Stop™ valves

“2x2” application rates of 50 gallons per acre can cost $100 or more per acre. Save just 5% and you have saved $5 per acre. Multiply that by the number of acres you plant to get your savings with Nozzle Stop valves on your planter. In-furrow “pop-up” savings are less, but still significant.

If you are doing in-furrow (pop-up) fertilizer Richway helps boost your profits in two ways. You eliminate wasted fertilizer by shutting off fertilizer when you shut off the seed. The Rate Controller maintains constant rates for every row, regardless of how many rows are shut off. No more yield robbing root burning.

Choose from two types of valves to control fertilizer for any system or rate

Direct Electric Solenoid Valves

Airpinch™ Air Operated Valves

Designed to work directly with electric clutches or electric seed meters, these solenoid valves will flow up to 30 gallons per acre to 45 psi. They feature a large orifice and clean flow path to minimize pressure drop and minimize clogging. Easily opened for inspection and cleaning.
Richway Nozzle Stop pinch valves were introduced in 1985 and quickly became the preferred method for controlling nozzles on “floater” sprayers. Because they are high flow, economical, reliable, fast acting, and non-clogging, custom applicators recognized them as superior to other methods for controlling liquid fertilizer. These same reasons make this smaller Richway Nozzle Stop Airpinch valve ideal for controlling fertilizer on all types of planting equipment.

Quickly and easily mounted on any planter

Maximum air pressure 90 psi.

1/4” up to 30 gallons per acre, 3/8” up to 100 gpa

Larger sizes available; up to 2 inch.

Kits and components available in a variety of configurations.

Nozzle Stops are “fail open” so loss of air pressure or sleeve failure will result in fertilizer flow.

With the electric power requirements of modern planters, there often is not enough power left to operate large electric solenoid valves required for the high flow rates of banding of starter fertilizer. By using the Richway “electric over air” solenoid valve, either 1/4” or 3/8” Nozzle Stop valves are controlled using the electric clutch signal to a small solenoid block. The Richway solenoid PWM control system eliminates high inrush current from firing all solenoids at one time. (Patent Pending) The solenoid tee’s into the wiring harness at the clutch using a Richway supplied adapter harness. The solenoid then controls a Nozzle Stop pinch valve with the seed clutch signal. A 70 psi air source is required, but is often already available. Richway offers a variety of valve sizes with the 1/4” commonly used for in-furrow, and 3/8” commonly used in banding applications.

Minimum operating pressure 18 psi

Here’s how it works

Air pressure at the control inlet completely collapses the internal rubber sleeve to provide immediate and complete shut-off.

Electric Clutch Installations “Electric over Air”

With the electric power requirements of modern planters, there often is not enough power left to operate large electric solenoid valves required for the high flow rates of banding of starter fertilizer. By using the Richway “electric over air” solenoid valve, either 1/4” or 3/8” Nozzle Stop valves are controlled using the electric clutch signal to a small solenoid block. The Richway solenoid PWM control system eliminates high inrush current from firing all solenoids at one time. (Patent Pending) The solenoid tee’s into the wiring harness at the clutch using a Richway supplied adapter harness. The solenoid then controls a Nozzle Stop pinch valve with the seed clutch signal. A 70 psi air source is required, but is often already available. Richway offers a variety of valve sizes with the 1/4” commonly used for in-furrow, and 3/8” commonly used in banding applications.

Maximum air pressure: 90 psi
1/4” up to 30 gallons per acre, 3/8” up to 100 gpa
Larger sizes available: up to 2 inch
Kits and components available in a variety of configurations.
Nozzle Stops are “fail open” so loss of air pressure or sleeve failure will result in fertilizer flow.

Richway Direct Acting Solenoid Valve

Designed and manufactured by Richway. Features high temperature rated continuous duty coil, silver solder brazed internal assembly, which is then passivated for maximum corrosion resistance. 316 Stainless Steel and Magnetic Stainless Steel where required. Maximizes corrosion resistance. These solenoid valves are 100% made at Richway — coil winding, component machining, injection molding, and diaphragm molding are all done at Richway. Supplied with Deutsch connector. Harness options available. See price list.

Richway Direct Electric Solenoid Valves

Designed to work directly with electric clutches or electric seed meters, these solenoid valves will flow up to 30 gallons per acre at pressures to 45 psi. They feature a large orifice and clean flow path to minimize pressure drop and minimize clogging. Easily opened for inspection, cleaning and diaphragm isolation.

They use the exclusive Richway Power Miser™ chip for minimal current draw. (Patent pending) Control chips are randomly staggered to fire within 300 milliseconds, but not at once, to prevent excessively high inrush currents. After actuation current drops by 25% from 8 watts to 5.5 watts

Normally Open — Allows flow except when NOT energized. For use with row clutches and most electric meters.

Richway manufactures normally open and normally closed two way and three way solenoid valves

Anatomy of a Solenoid Valve

Retaining Screw
Plunger
Coil
Molded Body
Pole Piece
Push Rod
Diaphragm
Base

Minimum operating pressure 18 psi

Valve flow rate graph in gallons per minute and gallons per acre

O/P Curve in GPM/GPA