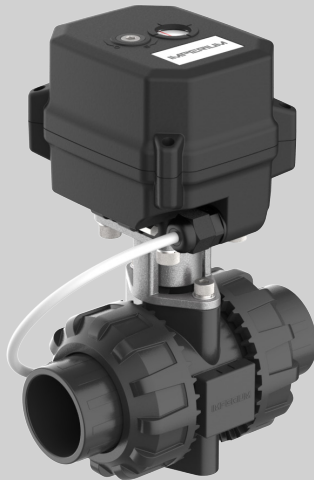


**IMPERIUM**  
CONTROLS



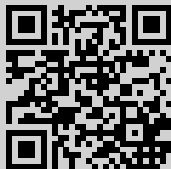
**PRO SERIES**

**24V BALL VALVE**

User Manual

## BEFORE YOU PROCEED

Make sure to register your products by visiting [www.imperium-controls.com/warranty](http://www.imperium-controls.com/warranty) or by scanning the QR code. Registering for warranty ensures faster service on any future unseen circumstances and keeps you connected on updates.



## INSTALLATION TIPS

- Use primer and glue for socket connections.
- Use teflon tape for threaded connections.
- Valves need a charging time of 30 seconds or more to enable full closure.

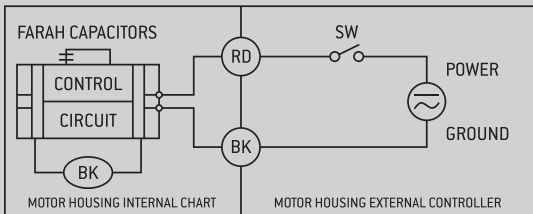
## TECHNICAL SPECS

|                       |                                |
|-----------------------|--------------------------------|
| Voltage               | AC/DC 24V                      |
| Working Current       | ≤1A                            |
| Open/Close Time       | ≤12 Seconds                    |
| Wiring Control Method | CR202                          |
| Maximum Temperature   | 131 F °                        |
| Maximum Pressure      | 150 PSI                        |
| Valve Body Material   | PVC                            |
| Lifetime              | 35,000 Cycles                  |
| Circulation Medium    | Nutrient Solutions, Water, Air |
| Protection Rating     | IP67                           |

## WIRING

- Suitable working voltage - AC/DC 24V.
- CR 202 wiring control method - reset function, normally closed and normally open.
- 2 wire control - capacitance return in case of power failure.
- When SW is closed, the valve is open. The valve automatically powers off after it is in place.
- When SW is open, the valve is closed. The valve automatically powers off after it is in place.
- Do not exceed the working voltage.

## CR 202 WIRING DIAGRAM



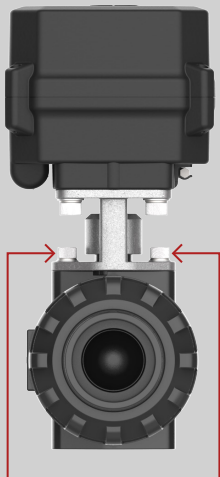
## MANUAL OVERRIDE

- "S" and "O" stands for shut and open valve positions.
- Use the included allen wrench to manually move the valve.
- When you do a manual override, you must electronically cycle the valve 2-3x to reposition the valve back to its normal set points.

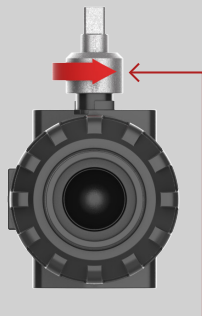


## SETTING VALVE AS NORMALLY OPEN

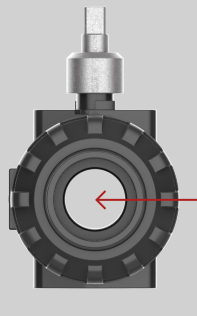
The valve is able to be manually set from being normally closed to normally open.



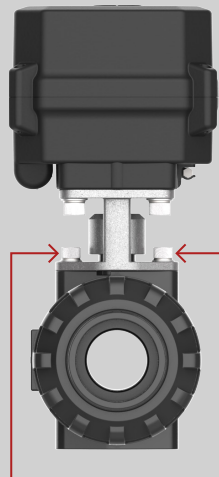
1. Remove the two lower allen bolts to separate the motor housing from the valve housing.



2. Use your fingers to rotate the metal shaft 90 degrees.



3. Check to make sure the valve is now in the open position.



4. Reassemble the motor housing to the valve housing.

## **LIQUID REQUIREMENTS**

- Approved for use with water and nutrient solutions only.
- Not approved for use with oils or acids.

## **FAQ**

Q - Does the valve require continuous power to hold its position?

A - It does require continuous power to hold open, however it is much less than the required opening amperage.

Q - Can these valves be installed outdoors?

A - Although the valves feature a water resistant 1P67 rated housing, they are not recommended to be installed outdoors without a cover or enclosure.

Q - Can this valve operate manually?

A - The valve can be manually operated with the built-in allen wrench.

Q - Will the valve close in the event of a power failure?

A - Yes, our valves will return to the home position in the event of a power loss.

Q - Does this valve work in both flow directions?

A - Yes, unlike standard solenoid valves, these ball valves are bi-directional and will flow in either direction.

Q - What is the correct mounting position?

A - Our valves can be mounted in both vertically up or vertically down orientations.

## 1 YEAR WARRANTY

- Imperium Controls warrants the mechanical and electronic components of the 24V Ball Valve and guarantees the materials and workmanship free of defects, if used under normal operation conditions within a period of one (1) year from the purchase date.
- All returns and claims must be presented with the original proof of purchase.
- If you find that there are any defects with this product that relate to either the workmanship or the materials but are not due to improper use or user error, Imperium Controls shall, at its discretion, either replace or repair the product using the appropriate new or reconditioned parts.
- In the case that Imperium Controls decides to replace the entire product, the date of the limited warranty shall apply to the replacement from the date of the purchase of the initial product for one (1) year.
- All RMA's must be registered at [www.imperium-controls.com/rma](http://www.imperium-controls.com/rma)

