



The RC8S & RC14S solenoid valves are an optional safety accessory for Rainfresh RC Series monitored Ultraviolet Disinfection Systems. Their function is to shut off the water supply in case of power-failure, UV lamp failure or unsafe/low levels of UV dose, thereby preventing consumption of un-treated drinking water.

Where is the solenoid connected?

The solenoid has 3/4" or 1" female NPT connections and is typically plumbed on the UV outlet. All RC series UV systems have a low voltage solenoid output (see fig 1) to which the solenoid is electrically connected. It does not

need a separate power connection.

How does the solenoid work?

The solenoid operates in a "normally closed, open-when-energized" configuration. This means that when the solenoid does not receive power, it is in a closed position and opens water flow only when energized. In case of a power or lamp failure or UV output less than safe level, the solenoid instantly returns to the closed position and shuts off the water supply, thereby preventing potentially unsafe water from being consumed. When normal UV function is restored, the solenoid automatically opens up the water for use.

What if I need water during shut-down?

The RC8S & RC14S solenoids feature a manual override knob which can be turned to allow water flow during shut-down. This water can be used for washing, toilets etc, but should not be used for drinking. When normal conditions are restored, the knob should be turned to its original position and the plumbing lines after the UV should be sanitized with bleach to prevent microbial growth within the plumbing lines.

Technical Specifications

	RC8S	RC14S
Voltage	12 V DC	
Inlet/Outlet Connection	3/4" Female NPT	1" Female NPT
Max Pressure	6.9 bar (100 psi)	
Seals	EPDM	
Body	Brass - UNI EN 12165 CW617N	
Armature tube	Stainless steel AISI series 300	
Fixed core	Stainless steel AISI series 400	
Plunger	Stainless steel AISI series 400	
Phase displacement ring	Copper - Cu 99,9%	
Spring	Stainless steel AISI series 300	

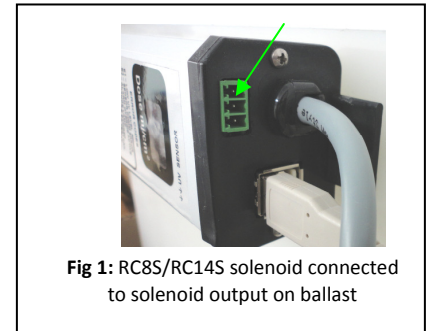
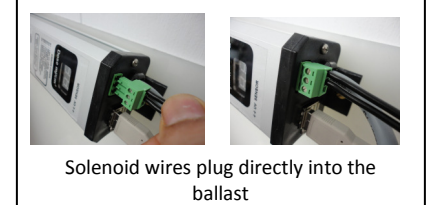
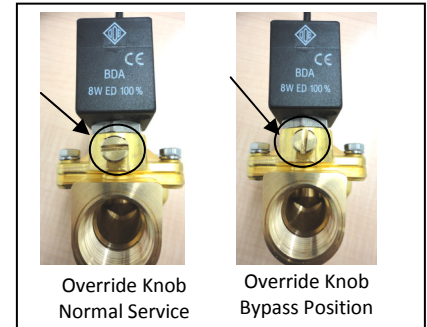
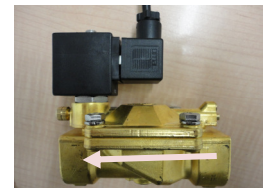


Fig 1: RC8S/RC14S solenoid connected to solenoid output on ballast



Solenoid wires plug directly into the ballast



FLOW DIRECTION



Envirogard Products Limited

446 Major Mackenzie Drive East, Unit 6
Richmond Hill, ON L4C 1J2, Canada

Tel: (905) 884 9388 Helpline: 1.800.667.8072 ; Fax: (905) 884 3532

E-Mail: info@rainfresh.ca ; Web: www.rainfresh.ca