### Introduction

- Newer high-efficiency motors are able to convert a higher percentage of their electric input to useful mechanical work resulting in energy and cost savings.

- Rain Bird Variable Frequency Drive (VFD) pump stations save energy while delivering the water pressure necessary to ensure maximum water use efficiency.

- Rain Bird designs pump stations specifically for the application, ensuring the pump runs at maximum efficiency. Delivering the right pressure as demanded by the system ensures your irrigation system is efficient and effective. For assistance call 520-806-5620 or email pumps@rainbird.com.

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### Water Saving Tips

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- Rain Bird designs pump stations specifically for the application, ensuring the pump runs at maximum efficiency. Delivering the right pressure as demanded by the system ensures your irrigation system is efficient and effective. For assistance call 520-806-5620 or email pumps@rainbird.com.
Rain Bird’s CLP Series pump station is designed for boost and flooded suction-lift applications. The CLP Series is a complete pump package that is simple to install and operate. It includes a professional-grade pump, a marine-grade aluminum enclosure, highest quality pump protection, and optional mounting for a Rain Bird controller. Home owner associations, small sports fields, schools, parks, and small agricultural projects are ideal applications. The CLP Series compact design, durable centrifugal boost pump, and ease of installation, make this a perfect solution for applications with flows up to 120 gpm with the Boost model, 140 gpm with the Suction Lift model. With this complete solution there is no need to deal with the hassle of stick building a pump station with non-compatible parts and a makeshift enclosure. Only Rain Bird provides a totally integrated irrigation solution with UL listed components and a one year warranty that dependably deliver healthy, beautiful landscapes, saving time and minimizing maintenance.

At-A-Glance Description

- Variable Frequency Drive (VFD)
- Pump Start Relay included
- Aluminum Deck and Enclosure
- Stainless Steel Piping
- Isolation Valve for maintenance and priming
- Manual Switch provides user full control and override capabilities
- 2” – Discharge, 2” Intake NPT (Boost), 2 ½” Suction Port NPT (Suction Lift)
- Mounting options for Rain Bird Controllers

Features

- Plumbing Configurations
  - Inlet and discharge piping on opposite sides of the enclosure (as shown)
  - ¾” and 2” Priming Ports Included
- Mechanical Features
  - Isolation valve
  - Liquid filled pressure gauge
  - Rugged centrifugal pump (Suction Lift model is self-priming)

Enclosures / External Connections

- Marine grade aluminum enclosure and deck
- Stainless Steel piping
- Fused main power disconnect
- Pump Control
  - Runs based on signal from irrigation controller, or from optional Flow Start Switch (Boost model only)
  - 24VAC Pump start relay included. Other voltages available as an accessory.
  - 130 °F Temperature cutout switch

• Electrical Features
  - Incoming power: Single or three phase 208V, 220V, 230V AC
  - TEFC Motor (Boost Model), ODP Motor (Suction Lift Model)
  - UL listed components
  - Energy efficient – Variable Frequency Drive (VFD) maintains constant pressure at varying flow demand.
  - Stainless steel pressure transducer
  - Red light for VFD alarms
  - Green pump running light
  - Pipe fill mode reducing pressure surge at pump start up
  - Programmable override pump speed
  - Loss of prime and pipe break alarm
  - Dead head shut down
  - Transducer loss shut down

• Back panel for mounting Rain Bird controllers
  - Pre-drilled for ESP-Me, ESP-LXMe, and ESP-LXD Series Controllers. (Rain Bird controller purchased separately)
  - Separate independent power feed required to power controller.
  - Mounted inside or outside aluminum enclosure

Accessories

- Surge Suppression Kit
  - Single Phase (208-230 VAC) p/n CLPSES1P
  - Three Phase (208-230 VAC) p/n CLPSES3P
- Pump Start Relay
  - 6VDC p/n CLPPSR06DC
  - 12VDC p/n CLPPSR12DC
- Boost Accessories (Boost Model Only)
  - Flow Start Kit p/n CLP8TSW
  - Suction Lift Accessories (Suction Lift Model only)
  - Foot valve – 4” Vertical Flanged p/n CLPFVHVF4VF

Models

- CLP05VHASC1: CLP Pump Station – Suction-Lift
- CLP05VBASC1: CLP Pump Station – Boost
Rain Bird® LC Series

¾ to 3 hp; Up to 60 psi (4.1 bar); Up to 115 gpm (26.1 m³/h)

Features

- Revolutionary complete pump package that includes a professional-grade pump, the highest quality pump protection and simple to install and operate fixtures all housed in a unique enclosure designed specifically for a pump
- Heavy duty pump available in ¾, 1, 1½, 2, and 3 hp offers brass impellers, cast iron housing & stainless steel bolts & ports for pressure, temperature probe & priming
- PSRPT for Shut-down protection. Provides protection if pump experiences loss of pressure or high temperature situations. The PSRPT is housed in a powder coated steel enclosure
- Aesthetically pleasing powder coated enclosure. Provides safe and vandal proof encasement of pump and controls
- Clam shell powder coated steel enclosure. Offers full accessibility to pump and electrical controls
- Quick disconnecting coupling on discharge and suction provides simple on-off connections to speed the hook-up and winterization processes
- Cooling louvres provide ample air to prevent motor and pump from overheating
- 1.5” PVC adapter and pan drain, discharge line through bottom of enclosure insures against theft
- Discharge option through bottom of enclosure or side of enclosure
- Quick disconnecting piggy-tail power cord assures at-pump safety
- 230 volt main power plug
- Padlock ring for security

Electrical Power Specification

- 60Hz, 1-phase power: 208V, 230V

Applications

- Suction Lift or Boost
- Potable or Reclaimed Water Supply
- Residential, Light Commercial, Parks, or Recreational

Models

- LC750: LC Series - ¾ hp, 1 ph, pump
- LC1000: LC Series - 1 hp, 1 ph, pump
- LC1500: LC Series - 1.5 hp, 1 ph, pump
- LC2000: LC Series - 2 hp, 1 ph, pump
- LC3000: LC Series - 3 hp, 1 ph, pump

Capacity US gpm based on 5ft. Suction Lift

<table>
<thead>
<tr>
<th>HP</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>45</th>
<th>50</th>
<th>55</th>
<th>60</th>
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<tr>
<td>1</td>
<td>73</td>
<td>65</td>
<td>57</td>
<td>47</td>
<td>35</td>
<td>18</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>1.5</td>
<td>75</td>
<td>70</td>
<td>68</td>
<td>60</td>
<td>48</td>
<td>35</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>2</td>
<td>102</td>
<td>98</td>
<td>92</td>
<td>82</td>
<td>74</td>
<td>61</td>
<td>52</td>
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<td>3</td>
<td>115</td>
<td>114</td>
<td>112</td>
<td>105</td>
<td>100</td>
<td>88</td>
<td>72</td>
<td>56</td>
<td>30</td>
</tr>
</tbody>
</table>

LC Series Pump Performance Curves
Low Profile Pump Stations – LP Series

Rain Bird’s LP Series Horizontal End Suction and Vertical multistage pump stations are designed for small to midsize boost, flooded suction and suction lift applications such as city parks and buildings, sports fields, commercial buildings, small home owner’s associations and large residential sites. Its low profile design, durable centrifugal or vertical multistage pump configuration, and choice of options make it an ideal choice for Turf irrigation applications.

Standard Features
- Cost effective – Standardized VFD driven pump system in enclosure delivers high performance with minimum investment
- Low Profile – Compact aluminum enclosure with powder coated skid and piping
- Energy efficient – Variable Frequency Drive (VFD) maintains constant pressure at varying flow demand
- Reliability – Simple, standard design, easy installation and maintenance
- Mechanical Features
  - Inlet Butterfly Isolation Valve
  - Discharge Butterfly Isolation Valve
  - Silent Check Valve
- Enclosures / External Connections
  - Marine Grade Aluminum Enclosure
  - Polyester Powder-Coated Steel Deck and Piping
  - Thermostat and Fan on Mechanical Enclosure
- Pump Control
  - Pump Start Relay
  - VFD - Variable Frequency Drive for Control of Pressure
- Display
  - Monochrome Touch Screen Display
  - Optional Color Touch Screen Display with Remote Communication Capability

Optional Features and Accessories
Visit: www.rainbird.com/landscape/products/pumps

Models
- Horizontal End Suction - LP Series
  - 5 to 10 HP; Up to 100 psi (6.9 bar); Up to 200 gpm (12.6 lps, 45.4 m³/h)
- Vertical Multistage - LP Series
  - 1 to 7.5 HP; Up to 120 psi (8.3 bar); Up to 0 gpm (5.7 lps, 20.4 m³/h)

LP Series – Horizontal End Suction - 1 Pump – Aluminum Enclosure

<table>
<thead>
<tr>
<th>Motor Size</th>
<th>5 HP</th>
<th>7.5 HP</th>
<th>10 HP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump Type</td>
<td>Horizontal End Suction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Requirement</td>
<td>480/60/3 V/HZ/PH</td>
<td>208-230/60/3 V/HZ/PH</td>
<td>208-230/60/1 V/HZ/PH</td>
</tr>
<tr>
<td>Inlet Pressure Requirement</td>
<td>Suction Lift or Boost Applications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outlet Pressure</td>
<td>Up to 100 psi (6.9 bar)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outlet Flow</td>
<td>Up to 200 gpm (12.6 lps, 45.4 m³/h)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concrete Slab Dimensions (min)</td>
<td>65” x 49” (165 cm x 125 cm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platform Skid Dimensions (min)</td>
<td>53” x 39.75” (135 cm x 101 cm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inlet / Discharge Size</td>
<td>2” Flange Fitting (adapter)</td>
<td>3” Flange Fitting (adapter)</td>
<td></td>
</tr>
<tr>
<td>Cabinet Height (from slab)</td>
<td>35” (89 cm)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LP Series – Vertical Multistage – 1 Pump – Aluminum Enclosure

<table>
<thead>
<tr>
<th>Motor Size</th>
<th>1 HP</th>
<th>1.5 HP</th>
<th>2 HP</th>
<th>5 HP</th>
<th>7.5 HP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump Type</td>
<td>Vertical Multistage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Requirement</td>
<td>480/60/3 V/HZ/PH</td>
<td>208-230/60 V/HZ/PH</td>
<td>208-230/60/1 V/HZ/PH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inlet Pressure Requirement</td>
<td>Suction Lift or Boost Applications</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outlet Pressure</td>
<td>Up to 120 psi (8.3 bar)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outlet Flow</td>
<td>Up to 90 gpm (5.7 lps, 20.4 m³/h)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concrete Slab Dimensions (min)</td>
<td>65” x 49” (165 cm x 125 cm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platform Skid Dimensions (min)</td>
<td>53” x 39.34” (135 cm x 101 cm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inlet / Discharge Size</td>
<td>2” flange fitting standard - 3” and 4” adapters available</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cabinet Height (from slab)</td>
<td>35” (89 cm) or 47” (119 cm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) Refer to pump performance curves, provided upon request from pumps@rainbird.com
Low to Medium Flow Pump Stations – D-Series

Rain Bird’s single pump, Vertical Multi-Stage and Horizontal End Suction stations in powder-coated green enclosures are designed for small to midsize boost, flooded suction and suction lift applications such as city parks and buildings, sports fields, commercial buildings, small home owner’s associations and large residential sites. Its small footprint, durable centrifugal or multistage pump configuration, and choice of options make it an ideal choice for Turf irrigation applications.

Standard Features

- Reliability – Integrated Plug-n-Pump provide single source responsibility for the entire pumping system insuring trouble-free installation and operation
- Energy efficient – Variable Frequency Drive (VFD) maintains constant pressure at varying flow demand
- Inlet and discharge isolation valves for easier mechanical serviceability
- Easy Start-up – All stations are water-tested at the factory prior to shipment.

Mechanical Features

- Inlet Butterfly Isolation Valve
- Discharge Butterfly Isolation Valve
- Silent Check Valve

Pressure / Flow

- Stainless Steel Pressure Transducer
- Flow Switch

Enclosures / External Connections

- Polyester Powder Coated Steel Enclosure
- Polyester Powder-Coated Steel Deck and Piping
- Re-Prime Piping (Suction Lift only)
- Thermostat and Fan on Mechanical Enclosure

Pump Control

- Pump Start Relay
- VFD - Variable Frequency Drive for Control of Pressure

Display

- Monochrome Touch Screen Display
- Optional Color Touch Screen Display with Remote Communication Capability

Optional Features and Accessories

Visit: www.rainbird.com/landscape/products/pumps

Models

- **Horizontal End Suction - 1 Pump - D Series**
  - 5 to 20 HP; Up to 130 psi (9.0 bar); Up to 350 gpm (22.1 lps, 79.5 m³/h)
- **Vertical Multistage – 1 Pump – D Series**
  - 3 to 15 HP; Up to 120 psi (8.3 bar); Up to 200 gpm (12.6 lps, 45.4 m³/h)

D-Series – Horizontal End Suction – 1 Pump – Green Enclosure

<table>
<thead>
<tr>
<th>Motor Size</th>
<th>5 HP</th>
<th>7 ½ HP</th>
<th>10 HP</th>
<th>15 HP</th>
<th>20 HP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump Type</td>
<td>Horizontal End Suction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Requirement</td>
<td>480/60/3 V/HZ/PH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>208-230/60/3 V/HZ/PH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>208-60/1 V/HZ/PH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inlet Pressure Requirement</td>
<td>Suction Lift (up to 3 ft. lift), or Boost Applications</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outlet Pressure</td>
<td>Up to 130 psi (9.0 bar) (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outlet Flow</td>
<td>Up to 350 gpm (22.1 lps, 79.5 m³/h) (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concrete Slab Dimensions (min)</td>
<td>90” x 48” (229 cm x 122 cm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platform Skid Dimensions (min)</td>
<td>78” x 36” (198 cm x 91 cm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inlet / Discharge Size</td>
<td>4” standard - 2”, 3” and 6” adapters are external accessories</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cabinet Height (from slab)</td>
<td>52” (132 cm) or 64” (163 cm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

D-Series – Vertical Multistage – 1 Pump – Green Enclosure

<table>
<thead>
<tr>
<th>Motor Size</th>
<th>3 HP</th>
<th>5 HP</th>
<th>7 ½ HP</th>
<th>10 HP</th>
<th>15 HP</th>
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</thead>
<tbody>
<tr>
<td>Pump Type</td>
<td>Vertical Multi-Stage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Requirement</td>
<td>480/60/3 V/HZ/PH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>208-230/60/3 V/HZ/PH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>208-230/60/1 V/HZ/PH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inlet Pressure Requirement</td>
<td>Suction Lift or Boost Applications</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outlet Pressure</td>
<td>Up to 120 psi (8.3 bar) (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outlet Flow</td>
<td>Up to 180 gpm (11.4 lps, 40.9 m³/h) (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concrete Slab Dimensions (min)</td>
<td>90” x 48” (229 cm x 122 cm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platform Skid Dimensions (min)</td>
<td>78” x 36” (198 cm x 91 cm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inlet / Discharge Size</td>
<td>4” Standard - 2”, 3” and 6” adapters available</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cabinet Height (from slab)</td>
<td>52” (132 cm) or 64” (163 cm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) Refer to pump performance curves, provided upon request from pumps@rainbird.com
Medium Flow Pump Station

Rain Bird’s single pump, Vertical Multi-Stage Enhanced station in a compact enclosure is designed for medium-flow boost, flooded suction and suction lift applications, such as; parks, sports complexes, golf courses, turf farms and other agricultural projects. Its compact design, durable centrifugal pump configuration, choice of options and enclosures make it an ideal choice for Turf irrigation applications with flows up to 500 gpm (31.5 lps, 114 m³/h).

Standard Features

• Entry Level through High Performance
• Control Package – With either a cost-effective monochrome touch-panel display or high resolution color touch-panel display for improved user interfaced and remote monitoring via VNC (Virtual Network Computing)
• Energy efficient – Variable Frequency Drive (VFD) maintains constant pressure at varying flow demand
• Enhanced Serviceability – Modern electrical design utilizing industrial breaker motor protection instead of fuses. Industrial circuit breakers are quickly reset and designed for an extended service life
• Inlet and discharge isolation valves for easier mechanical serviceability
• Plumbing Configurations
  - Inlet and Discharge Piping on same side of the enclosure (as shown)
• Mechanical Features
  - Inlet Butterfly Isolation Valve
  - Discharge Butterfly Isolation Valve
  - Pump Isolation Valve
  - Silent Check Valve
• Pressure / Flow
  - Stainless Steel Pressure Transducer
  - Flow Switch
• Enclosures / External Connections
  - Marine Grade Aluminum Enclosure
  - Polyester Powder-Coated Steel Deck and Piping
  - Thermostat and Fan on Mechanical Enclosure

Optional Features

Visit www.rainbird.com/landscape/products/pumps

Models

• Vertical Multi-Stage – 1 Pump Enhanced – Aluminum Enclosure
  - 5 to 50 HP; Up to 150 psi (10.3 bar); Up to 500 gpm (31.5 lps, 114 m³/h)

Vertical Multi-Stage – 1 Pump Enhanced –
Aluminum Enclosure shown
5 to 50 HP; Up to 150 psi (10.3 bar);
Up to 500 gpm (31.5 lps, 114 m³/h)
Main Irrigation Pump Stations

Flows Up To 5000 GPM

Reliable Variable Frequency Drive Pump Stations designed to serve as the main irrigation pump station for golf courses and large commercial sites. Rain Bird’s Pump Station Platforms are designed for both new construction projects and renovation projects.

Available in the following configurations:

- Vertical Turbine Pump Stations for Wet-well Applications
- Horizontal End Suction for Flooded Suction and Pressure Boosting Applications
- Vertical Multistage Pumps for Flooded Suction, Suction Lift, and Pressure Boosting Applications

Benefits:

- Enhanced Serviceability: Modern electrical design utilizing industrial breaker motor protection instead of time-wasting fuses. Industrial circuit breakers are quickly reset and designed for an extended service life.
- Reduced Downtime: Industrial circuit breakers are good for thousands of trips.
- Easy Operator Training: Multi-language color touch-screen that is easy to learn.
- Superior Corrosion Resistance; Choice of Polyester Powder Coated or Marine Grade Aluminum deck for the highest level of corrosion resistance. Less corrosion equals longer pipe, skid, and manifold life, reducing cost.
- No-Hassle Buying: Get everything you need for your irrigation system construction or renovation from the only manufacturer dedicated to irrigation for over seven decades.
- Real-Time Communication: The pump station communications in real-time with the central, allowing the central to make immediate decisions to maximize the efficiency of the entire irrigation systems.

Electrical Power Specifications:

- 60 Hz, 3-Phase Power: 208V - 230V (up to 60HP per pump), 460V, 575V
- 50 Hz, 3-Phase Power: 380V, 415V
- Other power configurations available upon request.

Options:

- Air Conditioned Electrical Panel Cooling System
- Enclosures: Aluminum, Painted Steel (Government Specified Colors)
- Fertigation Systems
- Filtration: Backwashing Screen Filters and Suction Scan Filters (Hydraulic or Electric)
- Heater, Skid Mounted 5KW
- Intake Box Screen with 3 Stainless Steel Screens
- Intermediate Pump, 10-25HP
- Lake Level Control: Float Switch and Ultrasonic
- Magnetic Flow Meter
- Modern, Radio, Hard-wired or Cellular Gateway connection
- Power Zones: 3, 5, or 10KVA
- Premium Efficient Motors
- VFD per pump
- Wye Strainer with Auto Back-flush
- Z Discharge Pipe

Pump Manager with SmartPump™

- Combine a Rain Bird Pump Station and central control software to fully integrate pump station operation with your central control. This combination allows the pump station and central control to respond to changes in the system and irrigation immediately, providing the highest level of efficiency.
- Smart Pump™ matches the irrigation system operation with the real capacity of the pump station, shortening the water window by an average of 20 percent and decreasing energy consumption. In addition, Smart Pump alerts the superintendent in real time of irrigation and pump station problems via cell phone text messaging. When an issue occurs such as an irrigation pipe break, the system verifies the break, shuts down the system and notifies the superintendent. Other systems cannot respond in a timely manner and can lose an hour of irrigation time trying to recover from a system fault.

Need Help Specifying a Pump?

- Email pumps@rainbird.com or call 520-806-5620 for assistance with quotes and specifications.
Pump Start Relays
For Optimum Pump Performance and Protection

Rain Bird Pump Start Relays (PSRs) provide worry-free performance for your irrigation system and are compatible with Rain Bird and other reliable irrigation controllers.

Dual Voltage Pump Start Relay Features
- Works with a lawn controller’s start/stop command to facilitate the electrical path from the breaker box to the pump motor
- Provides "pilot duty" operation for all types of electrically driven pump equipment with available coil voltages of 24, 110 and 220 VAC
- 40 AMP certified relay
- Quick connect terminals with wire nuts
- Grounding provision
- Compatible with 24 VAC timed lawn controllers
- Compatible with 110 or 220 VAC 3/4 HP thru 5 HP* single phase pumps
- Grey "baked-on" powder coating, for long life in difficult environments
- UL Listed as "Enclosed Industrial Control Panels" and backed by a one-year warranty
- Housed in compact NEMA3R weather-tight enclosures
- Not recommended for use with 2-wire controller/decoder systems

Model
- PSR110220

2-Wire Pump Start Relay Features
- Works with a lawn controller’s start/stop command to facilitate the electrical path from the breaker box to the pump motor
- Provides "pilot duty" operation for all types of electrically driven pump equipment with available coil voltages of 24, 110 or 220 VAC
- 40 AMP certified relay
- Quick connect terminals with wire nuts
- Grounding provision
- Compatible with 24 VAC timed lawn controllers
- Compatible with 110 or 220 VAC 3/4 HP thru 5 HP* single phase pumps
- Grey "baked-on" powder coating, for long life in difficult environments
- UL Listed as "Enclosed Industrial Control Panels" and backed by a one-year warranty
- Housed in compact NEMA3R weather-tight enclosures
- Includes an additional ice cube relay for 2-wire controller/decoder systems

Models
- PSR110IC or PSR220IC

Pump Start Relays Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Line Voltage</th>
<th>Coil Voltage</th>
<th>hp</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSR110IC</td>
<td>110</td>
<td>24</td>
<td>3/4 through 2*</td>
</tr>
<tr>
<td>PSR220IC</td>
<td>220</td>
<td>24</td>
<td>3/4 through 5*</td>
</tr>
<tr>
<td>PSR110220</td>
<td>110 or 220</td>
<td>24</td>
<td>3/4 through 5*</td>
</tr>
</tbody>
</table>

* National electrical code (NEC) states all motors will be thermally protected from excessive “amperage drain.” Most motors under 2 hp are supplied with thermal protection from the motor manufacturer. For motors over 2 hp, code-compliant PSRB pump protection is recommended.

NOTE: Circuit breakers are never classified as motor protection.

NOTE: Check with your local health department for regulations and requirements for backflow prevention.
G-Series Hydraulic Suction Scanning Screen Filter
Economy and Value with Lower Backwash Volumes

Irrigation Uses
Self-cleaning line powered hydraulic water filters for turf, landscape, agriculture, greenhouse and nursery applications.

Features
- Flow rates: 25 – 1750 gpm
- Max Temperature: 210° F
- PVC/Mesh screen standard
  - Sintered and wedgewire screens available upon request
- Standard screen opening: 120µ
  - Optional: 15µ – 5000µ
- Working pressure: 35-150 psi
  - Higher pressures optional
  - Stainless steel optional
- Backwashing initiated automatically by time or pressure differential via integrated Rain Bird controller
- Flanged inlet and outlet standard except on HS-G-02 model filter only configurations which are threaded.
  - Grooved inlet and outlet configuration optional
- Available as filter only or as filter including bypass manifold and valves.

G-Series Suction Scanning Screen Filter Performance Data

<table>
<thead>
<tr>
<th>Line Size (in)</th>
<th>Carbon Steel Model Number</th>
<th>PVC/Mesh Std. Flow Rate (GPM)</th>
<th>PVC/Mesh Screen Area (in²)</th>
<th>Sintered Screen Std. Flow Rate (GPM)</th>
<th>Sintered Screen Area (in²)</th>
<th>Rinse Duration (Seconds)</th>
<th>Flush Volume (Gallons)</th>
<th>Rinse Valve Size (in)</th>
<th>Minimum Inlet Pressure During Rinse Cycle (PSI)</th>
<th>Access Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>HS-G-02-LE</td>
<td>110</td>
<td>85</td>
<td>65</td>
<td>64</td>
<td>110</td>
<td>110</td>
<td>95</td>
<td>8-10</td>
<td>4-5</td>
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<tr>
<td>3</td>
<td>HS-G-03-LE</td>
<td>175</td>
<td>155</td>
<td>120</td>
<td>120</td>
<td>175</td>
<td>175</td>
<td>175</td>
<td>12-16</td>
<td>6-8</td>
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<tr>
<td>4</td>
<td>HS-G-04-LS</td>
<td>280</td>
<td>155</td>
<td>120</td>
<td>120</td>
<td>350</td>
<td>350</td>
<td>325</td>
<td>12-16</td>
<td>6-8</td>
</tr>
<tr>
<td>4</td>
<td>HS-G-04-LE</td>
<td>350</td>
<td>155</td>
<td>120</td>
<td>120</td>
<td>350</td>
<td>350</td>
<td>350</td>
<td>12-16</td>
<td>14-18</td>
</tr>
</tbody>
</table>

Flow rates shown above are based on water quality of 25 PPM or better (good water quality).
For water with particulate load greater than 25 PPM please consult Rain Bird for appropriate flow de-rating.
Drawings of standard filter models listed above are available on www.rainbird.com
I+ Series
Hydraulic Suction Scanning Screen Filter

Irrigation Uses
Self-cleaning line powered hydraulic water filters for turf, landscape, agriculture, greenhouse, golf course and nursery applications.

Features
- Flow Rate: 15 – 7,350 gpm
- Max Temperature: 210° F
- Single electric ball valve for flushing operations standard
- 316 L stainless steel sintered screens standard
- Standard screen opening: 120µ
  - Optional: 15µ – 5000µ
- Working pressure: 35-150 psi
  - Higher pressures optional
- Material of Construction: Stainless Steel
- Backwashing initiated automatically by time or pressure differential via integrated Rain Bird controller
- Available as filter only or as filter including bypass manifold and valves.

"I+ Series" Suction Scanning Screen Filter Performance Data

<table>
<thead>
<tr>
<th>Line Size (in)</th>
<th>Stainless Steel Model Number</th>
<th>Std. Flow Rate (GPM)</th>
<th>Flow Rate</th>
<th>Sintered Screen Area (ft²)</th>
<th>Sintered Screen Area (in²)</th>
<th>Rinse Duration (Seconds)</th>
<th>Flush Volume (Gallons)</th>
<th>Flush Line Size (in)</th>
<th>Minimum Inlet Pressure During Rinse Cycle (PSI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>HS-C-04-A-S</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>3.00</td>
<td>432</td>
<td>10 to 30</td>
<td>15 to 50</td>
<td>1.5</td>
</tr>
<tr>
<td>4</td>
<td>HS-I-04-B-S</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>5.25</td>
<td>756</td>
<td>10 to 30</td>
<td>15 to 50</td>
<td>1.5</td>
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<tr>
<td>4</td>
<td>HS-I-04-B-D</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>9.25</td>
<td>1332</td>
<td>10 to 30</td>
<td>35 to 110</td>
<td>2</td>
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<tr>
<td>6</td>
<td>HS-C-06-B-S</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>4.00</td>
<td>576</td>
<td>6 to 10</td>
<td>10 to 16</td>
<td>1.5</td>
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<td>6</td>
<td>HS-I-06-B-S</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>5.25</td>
<td>756</td>
<td>10 to 30</td>
<td>15 to 50</td>
<td>1.5</td>
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<tr>
<td>6</td>
<td>HS-I-06-B-D</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>9.25</td>
<td>1332</td>
<td>10 to 30</td>
<td>35 to 110</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>HS-C-08-B-S</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>5.00</td>
<td>720</td>
<td>6 to 10</td>
<td>10 to 16</td>
<td>1.5</td>
</tr>
<tr>
<td>8</td>
<td>HS-I-08-B-S</td>
<td>1400</td>
<td>1260</td>
<td>1100</td>
<td>5.25</td>
<td>756</td>
<td>10 to 30</td>
<td>15 to 50</td>
<td>1.5</td>
</tr>
<tr>
<td>8</td>
<td>HS-I-08-D-S</td>
<td>2000</td>
<td>2000</td>
<td>1943</td>
<td>9.25</td>
<td>1332</td>
<td>10 to 30</td>
<td>35 to 110</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>HS-I-12-D-S</td>
<td>2000</td>
<td>2000</td>
<td>1943</td>
<td>9.25</td>
<td>1332</td>
<td>10 to 30</td>
<td>35 to 110</td>
<td>2</td>
</tr>
</tbody>
</table>

Flow rates shown above are based on water quality of 25 PPM or better (good water quality).
For water with particulate load greater than 25 PPM please consult Rain Bird for appropriate flow de-rating.
Drawings of standard filter models listed above are available on www.rainbird.com
E+ Series and E0+ Series Electric Suction Scanning Screen Filter

Irrigation Uses
Rain Bird’s E+ and E0+ Series automatic self-cleaning water filters utilize an electric motor to assist in cleaning during the backwash cycle in turf, landscape, agriculture, greenhouse, golf course, nursery applications and emerging green and blue industries like Aquaculture.

Filter Characteristics:
- E+ Series filters are parallel flanged
- E0+ filters are straight flanged
- Flow Rate: 15 – 7,350 gpm
- Max Temperature: 210° F
- Single electric ball valve for flushing operations standard
- 316 L stainless steel sintered screens standard
- Standard screen opening: 120µ
  - Optional: 15µ – 5000µ
- Working pressure: 15 – 150 psi
- Materials of Construction: Stainless Steel
- Backwashing initiated automatically by time or pressure differential via integrated Rain Bird controller

| “E+ Series” and “E0+ Series” Electric Suction Scanning Screen Filter Performance Data |
|---------------------------------|---------------------------------|------|------|------|-----------------|-----------------|-----------------|
| **E+ Series Models** | **E0+ Series Models** | **Line Size (in)** | **Std. Flow Rate (gpm)** | **Std. Flow Rate (gpm)** | **Std. Flow Rate (gpm)** | **Std. Flow Rate (gpm)** | **Sintered Screen Area (in²)** | **Flush Volume (Gallons)** | **Flush Line Size (in)** |
| HS-E-02-A-S | HS-E0-02-A-S | 2 | 200 | 200 | 200 | 200 | 2.65 | 382 | 15 to 50 | 1.5 |
| HS-E-03-A-S | HS-E0-03-A-S | 3 | 300 | 300 | 300 | 300 | 2.65 | 382 | 15 to 50 | 1.5 |
| HS-E-04-A-S | HS-E0-04-A-S | 4 | 500 | 500 | 500 | 500 | 2.65 | 382 | 15 to 50 | 1.5 |
| HS-E-04-B-S | HS-E0-04-B-S | 4 | 500 | 500 | 500 | 500 | 5.25 | 756 | 15 to 50 | 1.5 |
| HS-E-04-CS | HS-E0-04-CS | 4 | 500 | 500 | 500 | 500 | 7.00 | 1008 | 15 to 50 | 1.5 |
| HS-E-04-DS | HS-E0-04-DS | 4 | 500 | 500 | 500 | 500 | 9.25 | 1332 | 35 to 110 | 2 |
| HS-E-06-A-S | HS-E0-06-A-S | 6 | 650 | 630 | 535 | 530 | 2.65 | 382 | 15 to 50 | 1.5 |
| HS-E-06-B-S | HS-E0-06-B-S | 6 | 1000 | 1000 | 1000 | 1000 | 5.25 | 756 | 15 to 50 | 1.5 |
| HS-E-06-CS | HS-E0-06-CS | 6 | 1000 | 1000 | 1000 | 1000 | 7.00 | 1008 | 15 to 50 | 1.5 |
| HS-E-06-DS | HS-E0-06-DS | 6 | 1000 | 1000 | 1000 | 1000 | 9.25 | 1332 | 35 to 110 | 2 |
| HS-E-08-B-S | HS-E0-08-B-S | 8 | 1400 | 1260 | 1100 | 1050 | 5.25 | 756 | 15 to 50 | 1.5 |
| HS-E-08-C-S | HS-E0-08-C-S | 8 | 1700 | 1680 | 1470 | 1400 | 7.00 | 1008 | 15 to 50 | 1.5 |
| HS-E-08-D-S | HS-E0-08-D-S | 8 | 2000 | 2000 | 1943 | 1850 | 9.25 | 1332 | 35 to 110 | 2 |
| HS-E-10-C-S | HS-E0-10-C-S | 10 | 1900 | 1680 | 1470 | 1400 | 7.00 | 1008 | 15 to 50 | 1.5 |
| HS-E-10-D-S | HS-E0-10-D-S | 10 | 2000 | 2000 | 1943 | 1850 | 9.25 | 1332 | 35 to 110 | 2 |
| HS-E-10-ES | HS-E0-10-ES | 10 | 2700 | 2700 | 2573 | 2450 | 12.25 | 1764 | 35 to 110 | 2 |
| HS-E-12-E-S | HS-E0-12-E-S | 12 | 3100 | 2940 | 2573 | 2450 | 12.25 | 1764 | 35 to 110 | 2 |
| HS-E-12-F-S | HS-E0-12-F-S | 12 | 3800 | 3660 | 3200 | 3050 | 15.25 | 2196 | 35 to 110 | 2 |
| HS-E-14-E-S | HS-E0-14-E-S | 14 | 4100 | 3940 | 3573 | 3450 | 15.25 | 2196 | 35 to 110 | 2 |
| HS-E-14-F-S | HS-E0-14-F-S | 14 | 4300 | 4160 | 3790 | 3650 | 18.00 | 2592 | 35 to 110 | 2 |
| HS-E-16-E-S | HS-E0-16-E-S | 16 | 4700 | 4540 | 4173 | 4050 | 15.25 | 2196 | 35 to 110 | 2 |
| HS-E-16-F-S | HS-E0-16-F-S | 16 | 4800 | 4660 | 4300 | 4150 | 18.00 | 2592 | 35 to 110 | 2 |
| HS-E-18-E-S | HS-E0-18-E-S | 18 | 5100 | 4940 | 4573 | 4450 | 18.00 | 2592 | 35 to 110 | 2 |
| HS-E-18-F-S | HS-E0-18-F-S | 18 | 5200 | 5060 | 4700 | 4550 | 21.00 | 2992 | 35 to 110 | 2 |
| HS-E-20-E-S | HS-E0-20-E-S | 20 | 5500 | 5340 | 4973 | 4850 | 21.00 | 2992 | 35 to 110 | 2 |
| HS-E-20-F-S | HS-E0-20-F-S | 20 | 5600 | 5460 | 5100 | 4950 | 24.50 | 3528 | 35 to 110 | 2 |
| HS-E-24-H-S | HS-E0-24-H-S | 24 | 7350 | 7190 | 6820 | 6650 | 24.50 | 3528 | 35 to 110 | 2 |
| HS-E-30-H-S | HS-E0-30-H-S | 30 | 7350 | 7190 | 6820 | 6650 | 24.50 | 3528 | 35 to 110 | 2 |

** The above calculated flow rates are based on good quality water. For fair, poor or bad water contact Rain Bird. Drawings of standard filter models are available at www.rainbird.com

Standard Rain Bird controllers: Auto-EC-2-E 110/220V (Series filters integrated with a Rain Bird Pump station are controlled by pump station PLC).
PSS Series
Self-Cleaning Pump Suction Screen
Keep Debris Out of Your Pump and Irrigation System

Features

• Galvanized, Self-Cleaning Pump Suction Screen removes large trash and debris from water sources, saving time and money in energy, pumping efficiency and maintenance costs

• All water must pass through the pump suction screen attached to the end of the pump suction line before entering the pump intake pipe. A small, side-stream from the pump discharge plumbing drives two spray bars that continually rotate, jetting water at the screen and blasting debris away

• Heavy 12 mesh stainless steel screen increases your pump efficiency for many years to come

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Flow US GPM</th>
<th>Flow m³/ Hour</th>
<th>Screen Length (in)</th>
<th>Total Length (in)</th>
<th>Screen Diameter (in)</th>
<th>Flange Size (in)</th>
<th>Return Inlet Pipe Size (in)</th>
<th>Operating Pressure (min - max psi)</th>
<th>Weight Lbs.</th>
<th>Cleaning Spray (GPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSS200</td>
<td>325</td>
<td>73.8</td>
<td>11</td>
<td>25</td>
<td>16</td>
<td>4</td>
<td>1.5</td>
<td>35-100</td>
<td>38</td>
<td>20</td>
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<td>PSS400</td>
<td>550</td>
<td>124.9</td>
<td>15</td>
<td>28.8</td>
<td>16</td>
<td>6</td>
<td>1.5</td>
<td>40-100</td>
<td>57</td>
<td>20</td>
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<td>PSS600</td>
<td>750</td>
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<td>16</td>
<td>32.5</td>
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<td>40-100</td>
<td>101</td>
<td>20</td>
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<td>PSS800</td>
<td>950</td>
<td>215.7</td>
<td>18</td>
<td>34.5</td>
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<td>10</td>
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<td>45-100</td>
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<td>20</td>
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<td>PSS1000</td>
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<td>50-100</td>
<td>116</td>
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<td>PSS1400</td>
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<td>128</td>
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<td>60-100</td>
<td>160</td>
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<td>52.5</td>
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<td>16</td>
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<td>65-100</td>
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<td>57.5</td>
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<td>16</td>
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<td>40-65</td>
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<td>PSS3500</td>
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<td>59.5</td>
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<td>18</td>
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<td>40-65</td>
<td>358</td>
<td>44</td>
</tr>
</tbody>
</table>

Contact Rain Bird for drawings or visit www.rainbird.com to download.
**CS Series**
**Centrifugal Sand Separator**
Remove contaminants to minimize required maintenance and increase efficiency

**Features**
- Capacities of 4 to 8300 gpm
- Simple installation (no electrical power required)
- Efficient pre-filter to reduce sand load on downstream components
- Rain Bird Centrifugal Sand Separators are designed to separate abrasive particles before they can enter the irrigation system, keeping equipment clean and clear of debris, which minimizes the amount of maintenance required and increases operational efficiency
- The separator removes sand and particles that are heavier than water (materials with a specific gravity of 2 or greater)
- Liquids and solids enter the unit and begin traveling in a circular flow. This centrifugal action throws heavier particulates towards the filter walls and eventually downward in a spiral motion to the separation chamber. The particulates collect in the separation chamber and are purged manually from the system. The filtered water is then drawn to the separator’s vortex and through the outlet
- An optional automatic purge controller and valve can be used on all applications to automate the purge process, which eliminates the need for manual flushing. Small vertical design separators may be wall mounted or supported by the system piping

---

### Centrifugal Sand Separators Performance Data

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Flow* US GPM</th>
<th>Flow m³/Hour</th>
<th>Inlet / Outlet Line Size (in)</th>
<th>Length (in)</th>
<th>Weight Lbs.</th>
<th>Max. Particle Size (in)</th>
<th>Flush Valve Size (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vertical Separators</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>VCS-R5V</td>
<td>4 - 10</td>
<td>0.9 - 2.3</td>
<td>0.5</td>
<td>20</td>
<td>50.8</td>
<td>13</td>
<td>0.625</td>
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<tr>
<td>VCS-R7V</td>
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<td>2.3 - 4.6</td>
<td>0.75</td>
<td>20</td>
<td>50.8</td>
<td>15</td>
<td>0.375</td>
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<td>VCS-R10V</td>
<td>18 - 38</td>
<td>4 - 8.7</td>
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<td>30.5</td>
<td>77.5</td>
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<td>VCS-R12V</td>
<td>26 - 52</td>
<td>6 - 12</td>
<td>1.25</td>
<td>30.5</td>
<td>77.5</td>
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<td>VCS-R15V</td>
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<td>8.7 - 18</td>
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<tr>
<td>VCS-R20V</td>
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<td>14.5 - 27.6</td>
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<td>91.4</td>
<td>44</td>
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<td>VCS-R25V</td>
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<td>23 - 41.4</td>
<td>2.5</td>
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<td>VCS-R30V</td>
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<td>48</td>
<td>121.9</td>
<td>75</td>
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<tr>
<td>VCS-R40V</td>
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<td>4</td>
<td>52</td>
<td>132.1</td>
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<td><strong>Angled Separators</strong></td>
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<td>ACS-R40LA</td>
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<td>80</td>
<td>221</td>
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<td>293.4</td>
<td>493</td>
<td>1.5</td>
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<td>ACS-R80LA</td>
<td>800 - 1600</td>
<td>184 - 369</td>
<td>8</td>
<td>114</td>
<td>316.9</td>
<td>722</td>
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<tr>
<td>ACS-R100LA</td>
<td>1300 - 2300</td>
<td>299 - 529</td>
<td>10</td>
<td>123.5</td>
<td>342.9</td>
<td>840</td>
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<tr>
<td>ACS-R120LA</td>
<td>2025 - 3400</td>
<td>465 - 782</td>
<td>12</td>
<td>139</td>
<td>396.2</td>
<td>1400</td>
<td>1.5</td>
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<tr>
<td>ACS-R140LA</td>
<td>2975 - 5000</td>
<td>684 - 1150</td>
<td>14</td>
<td>148</td>
<td>424.2</td>
<td>1550</td>
<td>2</td>
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<tr>
<td>ACS-R160LA</td>
<td>4000 - 6200</td>
<td>920 - 1426</td>
<td>16</td>
<td>160</td>
<td>462.3</td>
<td>1850</td>
<td>2</td>
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<tr>
<td>ACS-R180LA</td>
<td>5100 - 8300</td>
<td>1173 - 1909</td>
<td>18</td>
<td>177</td>
<td>462.3</td>
<td>2400</td>
<td>2</td>
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</table>
HDF Series Disc Filters

Automatic self-cleaning disc filtration equipment

Features

- Automatic self-cleaning disc filtration equipment with 2” valves and high density polyethylene manifolds
- Ideal for surface and well water containing both organic (algae) and inorganic materials: rivers, reservoirs, canals, waste water, and well water containing light sand (<3PPM) and other contaminants
- The patented system’s helical action provides efficient cleaning
- Manufactured from engineered plastics to resist rust and corrosion from chemicals and water
- All units are factory tested prior to shipment
- Disc elements provide depth filtration—not just surface filtration
- Unit is pre-assembled with HDPE (High-density polyethylene) manifold for easy installation
- DP, time or manual backflush cycle can be imitated from the controller
- Plastic backflush valves are lightweight and corrosion resistant.
- Low maintenance and performs reliable backflush
- Filtration disc versatility (filtration grades can be easily changed)
- Available with 100, 130, 200 or 400 micron discs (specify when ordering)

Rain Bird HDF Series 1X2 filter backwash.

- FILTRATION STAGE: As water goes through the discs, particles are projected away due to the cyclone effect, reducing the backflushing frequency
- BACKFLUSHING STAGE: Water is projected through the discs, expelling the retained particles and evacuating them through the drainage manifold while the rest of the equipment is still in the filtration stage, supplying the remaining installation

Rain Bird HDF Series-2 systems backwashes one station at a time while the remaining elements continue filtering.

- FILTRATION STAGE: As water goes through the discs, particles are projected away and kept in suspension due to the cyclone effect, reducing the backflushing frequency.
- BACKFLUSHING STAGE: Water is projected through the discs, expelling the retained particles and evacuating them through the drainage manifold. The rest of the filters battery continue filtering. The filtration process restarts when the discs recompress. The backflush process is controlled by the Rain Bird Control Unit.
HDF Series Disc Filters (cont.)

Specifications

HDF Series 1x2 Disc Filters
- Suited for areas with or without electricity.
- Ideal where manual cleaning is troublesome.
- Compact design fits in tight spaces.
- Control Unit functions on pressure differential or time.
- Automatic self-cleaning 2” filter for low flow ranges.
- Maximum Flow: 106 gpm (24 m³/h)
- Maximum filtering surface: (231 in²/1492 cm²).
- Maximum pressure: 145 psi (10 bar)
- Maximum temperature: 140° F (60° C)
- Standard 100 micron: Optional 130, 200 or 400 micron.

HDF Series 2 Disc Filters
- Suitable for surface and well waters containing both organic (algae) and inorganic materials.
  - Rivers, reservoirs, canals and waste water
  - Well water containing light sand (<3 PPM) and other contaminants.
- Maximum flow: 845 gpm (192 m³/h)
- Maximum filtering surface: (231 in²/1492 cm²)
- Maximum pressure: 145 psi (10 bar)
- Maximum temperature: 140° F (60° C)
- Standard: 100 micron. Optional: 20, 50, 130, 200 or 400 micron.

Control Units
- Rain Bird Filtron 110 allows backwash activation by time or pressure differential. Controllers are available in 12 VDC, 110 VAC and 220 VAC.

Rain Bird Filtration Controller

F2 AC/DC-P Specifications

<table>
<thead>
<tr>
<th>INPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>115 - 230VAC</td>
</tr>
<tr>
<td>12 - 15VDC</td>
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<tr>
<td>230VAC (optional)</td>
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</table>

<table>
<thead>
<tr>
<th>OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>24VAC, 12VDC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to Two (2) stations plus master valve</td>
</tr>
<tr>
<td>Input voltage 115, 230VAC (optional) 12VDC</td>
</tr>
<tr>
<td>Output selectable to operate 24VAC, 12VDC solenoids</td>
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<tr>
<td>Pressure differential (PD) gauge included</td>
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<tr>
<td>Fixed PD delay</td>
</tr>
<tr>
<td>Resettable backwash count</td>
</tr>
<tr>
<td>Resettable alarm</td>
</tr>
<tr>
<td>Plastic outdoor box</td>
</tr>
<tr>
<td>Periodic, manual, or pressure differential (PD) actuation</td>
</tr>
<tr>
<td>Accurate timing</td>
</tr>
<tr>
<td>Simple programming</td>
</tr>
</tbody>
</table>