

## Universal Rainwater Pumps

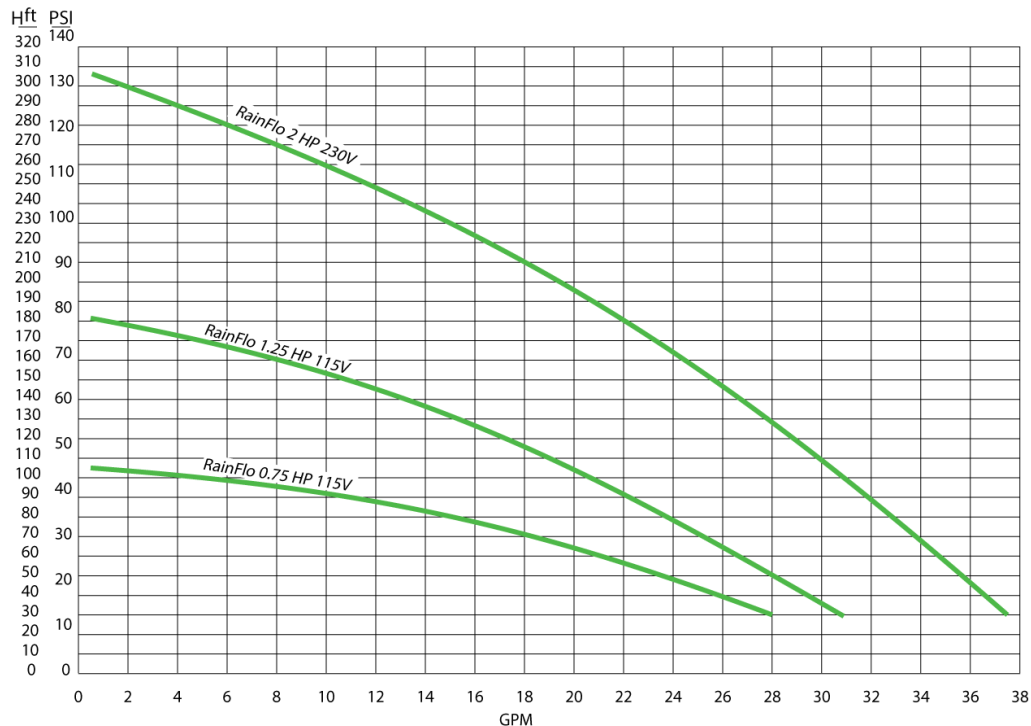
*High performance multi-stage rainwater pumps for residential, commercial, and light-industrial rainwater collection systems.*

### Submersible and External Mounted Capability:

RainFlo universal pumps are specially designed for the unique requirements of rainwater collection systems. Equipped with a large threaded bottom inlet large for internal flow-based cooling and connection to a floating filter, these pumps can be installed vertically or horizontally and they can either be submersed inside a tank or mounted externally on the ground or other platform. Other features include a stainless steel base, adjustable float switch for run-dry protection, external capacitor housed in a wiring box with circuit breaker and master on/off switch for long life and ease of maintenance.



### Pump Performance:



## Durable, Dependable and High Performance:

Available in 0.75HP/115V, 1.25HP/115V and 2.0HP/230V models, construction consists of 304 stainless steel housings, dual Italian mechanical seals, American thermal protection, GE-Noryl diffuser and impellers, external starting capacitor and a 45 foot power cord. The pump is particularly quiet and durable from its solid construction. The water end is installed under the motor which keeps the motor cooled with the pumped water. The Noryl impellers and diffusers offer high abrasion resistance while the Italian double mechanical seals ensure long life and enhanced reliability.

The oil chamber is filled with non-toxic cooling oil. Ball bearings are self-lubricating and internal cast iron components are electrocoated with polybutadiene varnish to prevent corrosion which is sometimes associated with the typical lower pH of rainwater.

Installation may be oriented either vertical or horizontal so long as water is available at the intake to prevent a run-dry condition.

## Specifications:

RainFlo Submersible Pumps			
Model No.	RF075-S	RF125-S & SC	RF200-S
<b>Horsepower:</b>	0.75	1.25	2.0
<b>Nominal Voltage Range:</b>	115V, 60Hz, 8.6A max.	115V, 60Hz, 14A max	230V, 60Hz, 9A max.
<b>P1kW:</b>	1.0	1.24	2.3
<b>P2kW:</b>	0.6	0.95	1.6
<b>Impeller stages:</b>	2	3	5
<b>Maximum flow:</b>	29 GPM	34 GPM	36 GPM
<b>GPM at 50 psi (0 Head):</b>	See Curve	17 GPM	29 GPM
<b>GPM at 40 psi (0 Head):</b>	8 GPM	22 GPM	31 GPM
<b>Maximum head:</b>	105' TDH	180' TDH	310' TDH
<b>System pressure:</b>	Up to 46 PSI	Up to 78 PSI	Up to 135 PSI
<b>Inlet/Outlet size:</b>	1-1/4" FPT	1-1/4" FPT	1-1/4" FPT
<b>Weight:</b>	36 Lbs.	41 Lbs.	46 Lbs.
<b>Dimensions:</b>	7" X 7" X 20" (incl. base)	7" X 7" X 22" (incl. base)	7" X 7" X 24" (incl. base)
<b>Thermal protection:</b>	Yes	Yes	Yes
<b>Motor:</b>	2-pole induction, Continuous duty	Same	Same
<b>RPM:</b>	3450	3450	3450
<b>Cooling:</b>	Water cooled/intake	Water cooled/intake	Water cooled/intake
<b>Insulation class:</b>	F	F	F
<b>Protection:</b>	IP68	IP68	IP68
<b>Certifications:</b>	CE	CE	CE
<b>Warranty:</b>	1 Year	1 Year	1 Year

# Installation Instructions

## Mounting location:

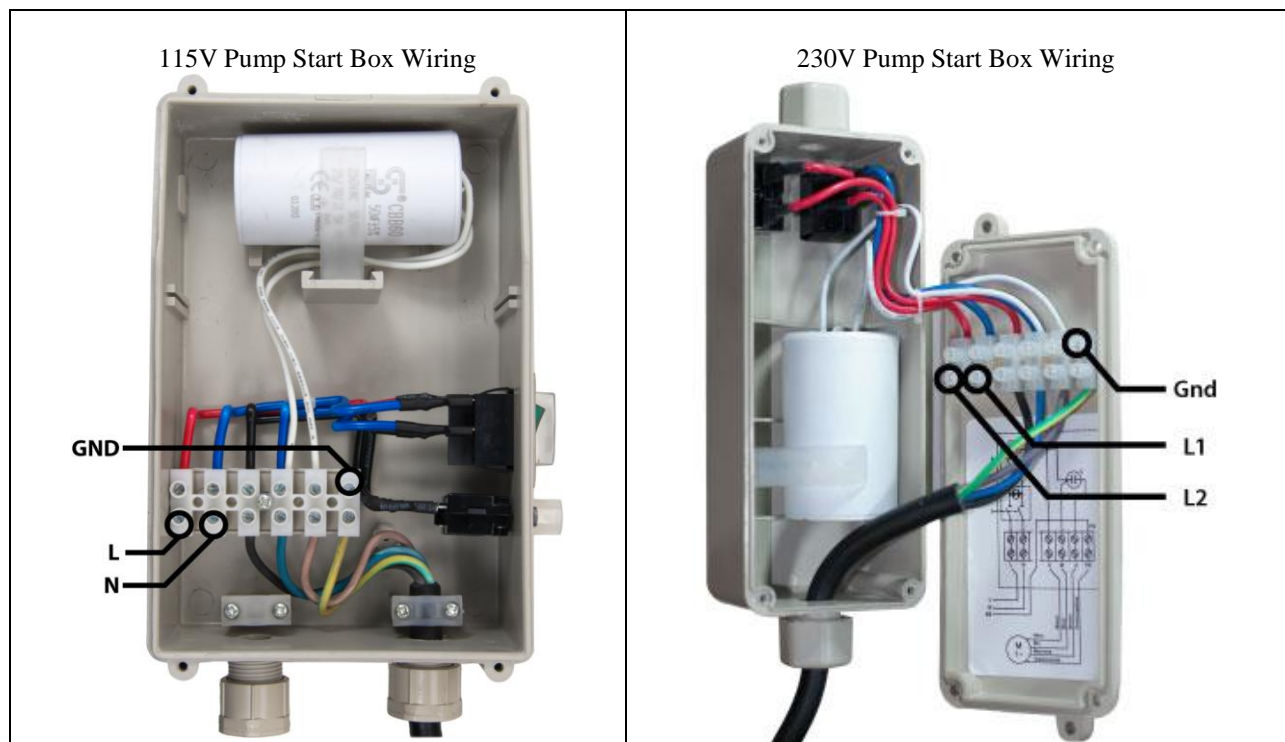
The pump may be mounted vertically or horizontally and may be fully or partially submersed or mounted externally on the ground or other sturdy platform. When mounted externally, the pump must be safely and securely mounted in a manner which prevents exposure to electrical connections and in a location which prevents damage and exposure to freezing temperatures.

## Environmental considerations:

If the pump may be exposed to freezing temperatures, the pump must be fully drained and protected with a food-grade antifreeze. The pump start box offers water resistance but should be mounted in a location away from direct exposure to rain, humidity, snow, excessive heat and direct sunlight.

## Pump to Start Box Wiring:

All electrical connections should be made by a licensed professional. The pump ships pre-wired to the pump start box as shown below. Excess wire between the pump and pump start box can be removed so long as the wires are re-connected properly.



## Pump Start Box to Pump Controller Wiring:

The pump start box serves as housing for the start capacitor and on/off control for maintenance and is not intended for regular pump starting and stopping operation. For regular pump control and run-dry protection, an intelligent pump control such as the RainFlo Pump Control or a pressure switch assembly should be used. The pump controller is wired between the main electrical power source and the Gnd/N/L(115V) or Gnd/L1/L2(230V) terminals inside the pump start box. Follow the wiring instructions for your particular pump control device. When wiring is complete, the plastic watertight fittings on each end of the pump start box should be hand-tightened and the cover re-secured. Do not over-tighten the fittings or they can possibly break.

**For additional information, see schematic next page**

# Schematic Diagram

