

# RED LION®

Trusted for generations.

## PRODUCT CATALOG



[RedLionProducts.com](http://RedLionProducts.com)



# The Red Lion Story



Trusted for generations. Our founding company has been part of the industry since 1935. In 1978, our sales team held a meeting at the Red Lion Hotel in the Washington area. Our customers wanted a line of pumps separate from the Plumbing/HVAC line. We decided to start a retail product line and thought the name Red Lion was a good fit. An aggressive marketing campaign followed and in 1979 Red Lion was born.

In 2007, the Red Lion pump line was purchased by Franklin Electric and in 2011 we merged the Red Lion line with the Little Giant Hardware line offering the diverse product line available today. We also invested in updating our brand: with new packaging, marketing materials, and new product developments. Today we continue to increase our product line with new and innovative products. The end result is a line we are very proud of.

**Our key philosophy is DIFFERENTIATION.**

- Red Lion is about **branding strategy** – we are the only pump manufacturer with **RED** pumps. What's so special about red pumps? It grabs the consumer's attention. We've redesigned our packaging to help simplify the selection process for consumers and store personnel and we've created eye-catching, color-coordinated marketing materials to further assist the consumer.
- Red Lion is **everything you'd expect** from a manufacturer who's been in the business since 1935 – quality, availability, and innovation.
- Red Lion is about **service** – the best way to identify and correct problems is going to the stores directly and that's exactly what our experienced sales force does. We interact with your staff, providing marketing materials, plan-o-gram services, training sessions, and even on-the-spot aisle training.
- Red Lion is about **product knowledge** – we have one of the most comprehensive training programs on the market. Our knowledgeable pump experts pass on their expertise and provide valuable tools and tips which help reduce returns and increase your sales.

# RED LION®

**Rugged. Reliable. Red Lion.**

# TABLE OF CONTENTS

Index by item and model number is located at the end of the catalog

## INTRODUCTION

- 01 Table Of Contents
- 02 Training Program
- 03 Featured Products

## 04 CLEAN WATER PRODUCTS

- 06 High Performance Cast Iron Shallow Well Jet Pumps
- 07 Cast Iron Shallow Well Jet Pumps
- 08 Stainless Steel Shallow Well Jet Pump
- 09 High Performance Cast Iron Convertible Jet Pumps
- 10 Pre-Charged Pressure Tanks
- 11 Pump & Tank Systems
- 12 4" Submersible Well Pumps
- 14 1-2-3 Easy Guide To Pump & Tank Selection
- 15 Typical Installations

## 16 LAWN & IRRIGATION PRODUCTS

- 18 Cast Iron Sprinkler Utility Pump
- 19 Stainless Steel Sprinkler Utility Pump
- 20 Centrifugal Self-Priming Sprinkler Pumps
- 21 Cast Iron Industrial Sprinkler Pump

## 22 SUMP PRODUCTS

- 24 Thermoplastic Sump Pumps
- 25 Cast Iron Sump Pumps
- 26 1/3 Hp Dual Cast Iron Sump Pump System
- 27 Pre-Assembled Duplex Piping And Check Valve Kit
- 28 Premium Submersible Stainless Steel Sump Pumps
- 29 Pedestal Pumps
- 30 Under Sink Sump Package
- 31 Back-Up Sump System

## 32 EFFLUENT/SEWAGE PRODUCTS

- 34 Cast Iron Surface Effluent Pumps
- 35 Cast Iron Sump/Effluent Pumps
- 36 Premium Submersible Stainless Steel Sump/Effluent Pumps
- 37 Heavy-Duty Cast Iron Effluent Pump
- 38 Cast Iron Sewage Pump
- 39 Premium Cast Iron Sewage Pump
- 40 Heavy-Duty Cast Iron Sewage Pump
- 41 Sewage Basin Systems

## 42 MULTI-PURPOSE PRODUCTS

- 44 Thermoplastic Utility Pumps
- 45 Aluminum Utility Pumps
- 46 Automatic Utility Pump
- 47 Heavy-Duty Submersible Utility Pump
- 48 Utility Transfer Pumps
- 49 Multi-Purpose Transfer Pump
- 50 Self-Priming Multi-Purpose Transfer Pump
- 51 Condensate Removal Pumps
- 51 Drill Powered Transfer Pump







## 52 ENGINE DRIVE PRODUCTS

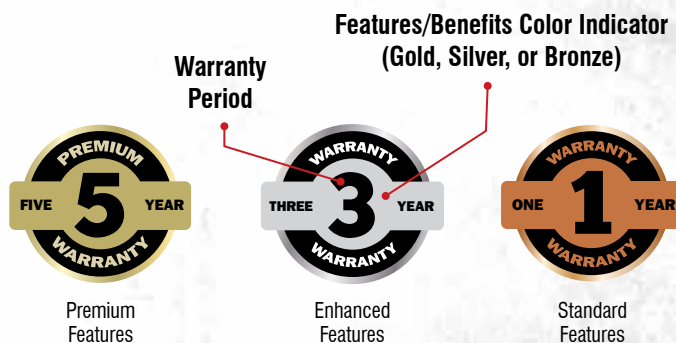
- 54 Aluminum Water Transfer Pump | 2RLAG-1
- 55 Aluminum Water Transfer Pump | 4RLAG-2H
- 56 Aluminum Water Transfer Pump | 5RLAG-2L
- 57 Engine Driven Cast Iron Transfer Pump | 5RLGF-8KRF
- 58 Cast Iron Centrifugal Pressure Pump | RLCGF-5
- 59 Thermoplastic Ag Chemical & Transfer Pump | 6RLPG-2U
- 60 Thermoplastic Ag Chemical & Transfer Pump | 6RLPG-2K
- 61 Aluminum Semi Trash Pumps | 6RLAG-2LST & 6RLAG-3ST
- 62 Aluminum Trash Pump | 6RLAG-3LTT

- 63 ACCESSORIES
- 64 MARKETING PROGRAM
- 66 TROUBLESHOOTING GUIDE
- 74 GLOSSARY OF TERMS
- 77 TECHNICAL DATA
- 78 INDEX OF ITEMS NUMERICALLY BY ITEM NUMBER
- 80 INDEX OF ITEMS ALPHABETICALLY BY MODEL

Every effort has been made to ensure the accuracy of the information provided in this catalog. We reserve the right to change any information contained in this catalog without notice. Stenographic and clerical errors are subject to corrections.

## EASY COLOR & WARRANTY GUIDE

Clean Water	Effluent/Sewage
	
Lawn & Irrigation	Multi-Purpose
	
Sump	Engine Drives
	





# TRAINING PROGRAM

Training is what truly differentiates Red Lion from our competitors. Our team of factory trained experts provides regional or in-store training at your location. Backed by years of experience and easy-to-use training materials, your staff will truly understand the products. All training is provided free of charge, and each participant receives valuable training material that they can refer to at any time.

## Benefits of training sessions:

- Provides your staff with product knowledge
- Improves customer satisfaction
- Improves your image
- Matches the right product to the job
- Reduces warranty returns

## Feedback from our customers' stores:

- "Best training and most informative we have ever received."
- "This is a very informative SALES training session for our staff."
- "Longest, most in-depth training we have ever received."
- "I attended your pump course yesterday. Having attended many courses over my working career, I rank you among the top 5 instructors. You were well prepared, answered questions easily, and offered excellent explanations with well-prepared samples. Thank you!"





## FEATURED PRODUCTS

### RL-SC33DUP 1/3 HP DUAL CAST IRON SUMP PUMP SYSTEM

#### APPLICATIONS

Ideal for average to high-volume water removal in residential spaces.

This system offers worry free operation, providing you with a back-up pump and double the flow rate when needed.

#### FEATURES & BENEFITS

- Dual automatic submersible sump pump
- Pre-assembled piping and check valves included
- Maximum head of 25'
- 10' power cord
- 1-1/2" FNPT discharges
- Piggyback float switches
- Clog-resistant design (1/2" solids handling)
- PSC motors

### RL50CON 1/2 HP HEAVY DUTY SUBMERSIBLE UTILITY PUMP

#### APPLICATIONS

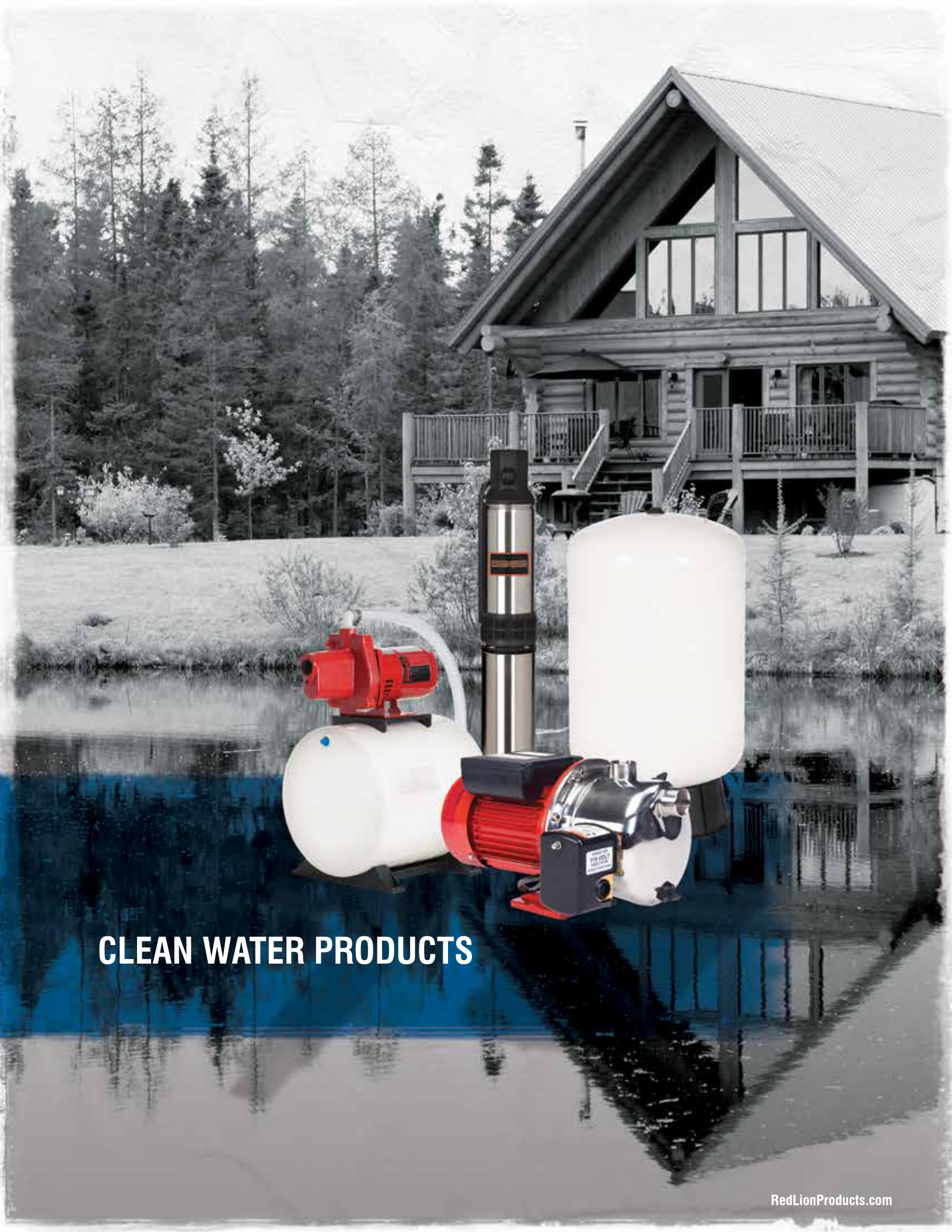
Construction grade, heavy duty submersible utility pump designed for the most demanding applications such as dewatering construction sites, ponds, and ditches.

#### FEATURES & BENEFITS

- Rugged construction with stainless steel motor housing and suction strainer
- Special urethane rubber impeller
- High efficiency, 115 V permanent split capacitor (PSC) motor, with thermal overload protection as well as upper and lower ball bearings for extended operation
- Double-seal system (silicon carbide primary mechanical seal with a carbon ceramic secondary seal)
- 20' extended length power cord



More details found inside catalog



**CLEAN WATER PRODUCTS**



## Why do you need a well pump?

A well pump supplies water to your home from within the ground. You may need a Red Lion well pump to replace an existing or undersized pump or to install in a new home. Whether you purchase a pump for replacement or new installation purposes, it is important to determine and select the correct pump.

## New installation

New installation, although not difficult, does require a bit more consideration:

### 1. What is the well's depth to water?

The depth of the well to water is easily determined by attaching a small floatable device to the end of a string. Lower the string into the well until the device floats. Simply mark the string at ground level, remove from the well, and measure the length.

### 2. What type of pump do you need?

Based on your well's depth to water, choose your pump.

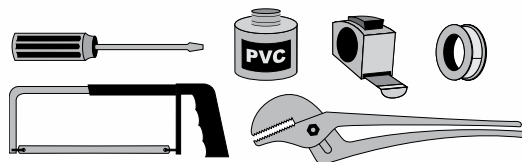
25 ft or less	Shallow well jet pump See illustration "A"
25 ft to 90 ft	Convertible jet pump See illustration "B"
25 ft to 400 ft	Submersible well pump See illustration "C"

There are both 2-wire and 3-wire submersible pumps. All 1 hp and smaller 3-wire submersible pumps include a control panel, which is required for installation.

### 3. What pump size do you need?

Determine well pump size by calculating how much water your house will use. This is easily done by counting the number of water fixtures in your home: showers, faucets, outdoor spigots, and water-using appliances (dishwashers, clothes washers, refrigerators). Each fixture requires one gallon per minute (gpm) of flow. The gpm is clearly marked on the front of each Red Lion box.

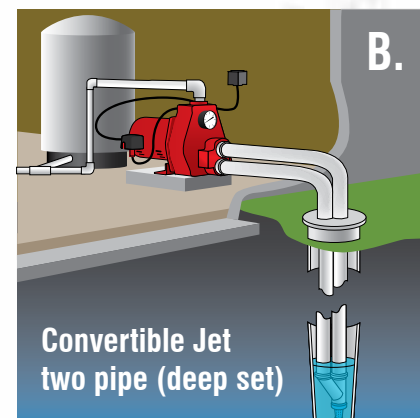
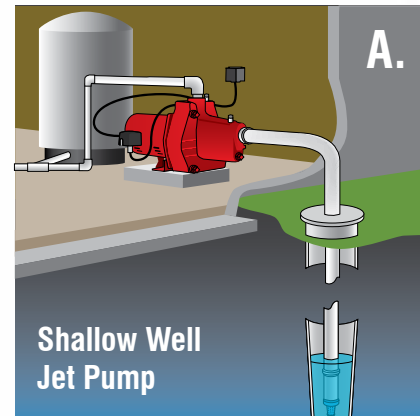
#### Tools needed



## Replacing an existing pump

Both shallow and deep well jet pumps pump water out of your well through one or two inlet pipes that run down below the ground into your well. Look at the number of pipes to determine the type of pump you need. If your pump has one pipe, you need a shallow well jet pump or a deep well submersible pump; two pipes mean you need a convertible jet pump for deep well application.

## Typical installations



# HIGH PERFORMANCE CAST IRON SHALLOW WELL JET PUMPS

## APPLICATIONS

Ideal for the supply of fresh water to rural homes, farms, and cabins that have suction lifts down to 25'.

## FEATURES & BENEFITS

- **Shallow well jet pump**  
Ideal for use in shallow well applications less than 25'
- **Rugged cast iron casing**  
Ideal for supplying fresh water to rural homes, farms, and cabins
- **Heavy-duty motor, 115/230 Volts**  
For years of service and reliability
- **Includes factory pre-set 30/50 pressure switch**  
Produces up to 50 psi with automatic shut-off
- **Glass-filled thermoplastic impeller and diffuser**  
For high performance and efficient water flow

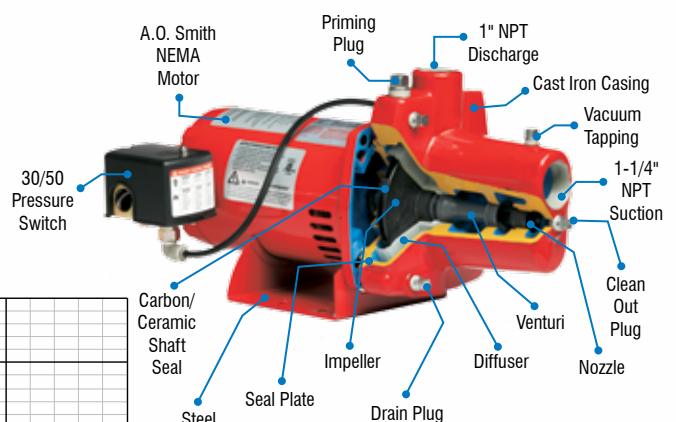
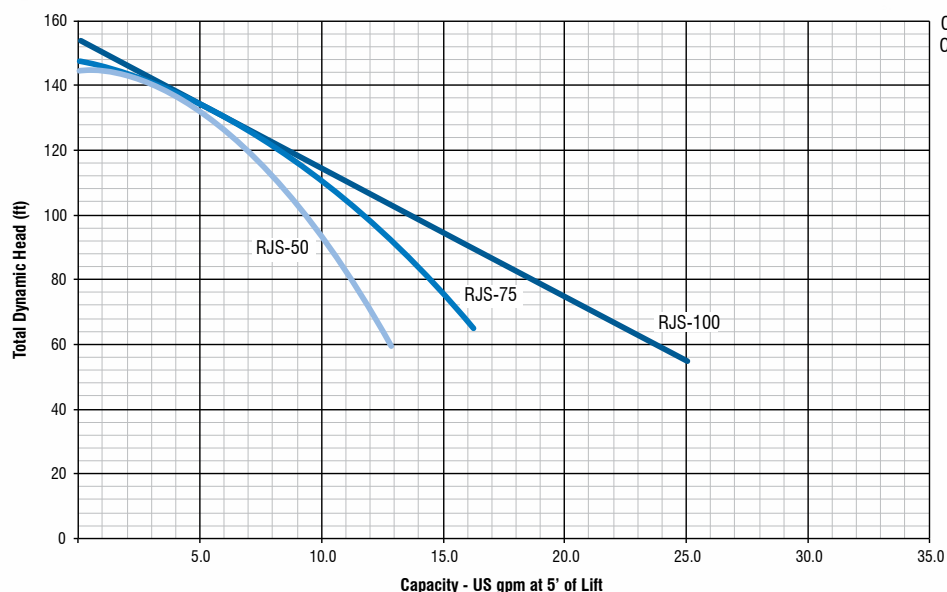


Model	Item Number	UPC	HP	Volts	Amps	Intake	Discharge	Suction Lift	Discharge Pressure (PSI)					Max Pressure PSI	Max Head	Max Flow GPM
									20	30	40	50	60			
									Gallons Per Minute							
RJS-50	602006	0 10121 12271 0	1/2	115/230	11.2 A @ 115 V / 5.6 A @ 230 V	1-1/4"	1" FNPT	5'	12.8	12.3	11.2	6.9	2.0	64.2	148'	12.8
								15'	9.8	9.6	9.4	4.7	-	59.9	138'	
								25'	5.6	5.5	5.3	2.3	-	55.5	128'	
RJS-75	602007	0 10121 12272 7	3/4	115/230	12.6 A @ 115 V / 6.3 A @ 230 V	1-1/4"	1" FNPT	5'	16.2	15.8	15.4	8.7	2.9	65.0	150'	16.2
								15'	12.1	11.3	10.6	6.3	0.2	60.6	140'	
								25'	7.2	7.0	6.8	3.5	-	56.3	130'	
RJS-100	602008	0 10121 12273 4	1	115/230	16.4 A @ 115 V / 8.2 A @ 230 V	1-1/4"	1" FNPT	5'	24.8	23.2	16.5	9.5	3.4	66.2	153'	24.8
								15'	18.1	17.4	13.8	6.9	1.3	62.1	143'	
								25'	10.5	10.4	8.8	4.2	-	57.2	132'	

## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RJS-50	10.33"	20.5"	11.5"	36	1.41	32	8	4
RJS-75	10.33"	20.5"	11.5"	37	1.41	32	8	4
RJS-100	10.33"	20.5"	11.5"	38	1.41	32	8	4

## High Performance Cast Iron Shallow Well Jet Pumps





## CAST IRON SHALLOW WELL JET PUMPS

### APPLICATIONS

Ideal for the supply of fresh water to rural homes, farms, and cabins that have suction lifts down to 25'.

### FEATURES & BENEFITS

- **Shallow well jet pump**  
Ideal for use in pumping at depths of 25' or less
- **Heavy-duty cast iron construction**  
For years of service and reliability
- **Includes factory pre-set 30/50 pressure switch**  
Produces up to 50 psi with automatic shut-off
- **115/230 Volt heavy-duty motor**  
TEFC design with simple connection to existing power source

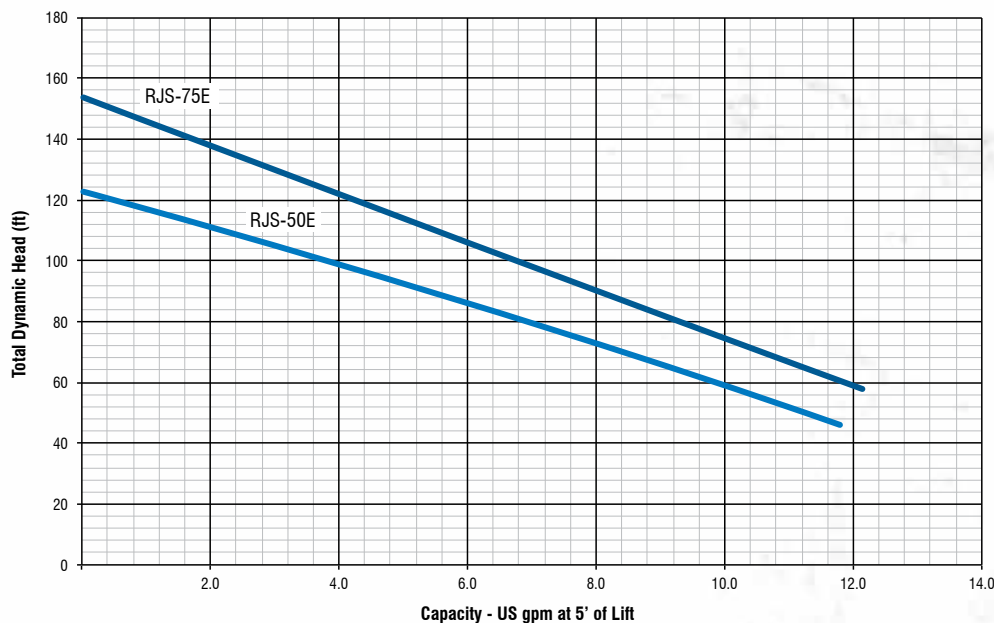


Model	Item Number	UPC	HP	Volts	Amps	Intake	Discharge	Suction Lift	Discharge Pressure (PSI)					Max Pressure PSI	Max Head	Max Flow GPM
									20	30	40	50	60			
									Gallons Per Minute							
RJS-50E	602234	0 10121 13467 6	1/2	115/230	6.5 A @ 115 V/ 3.25 A @ 230 V	1"	1" FNPT	5'	11.8	8.3	4.3	2.4	-	52	120'	11.8
								15'	9.6	5.8	3.2	1.4	-	48	110'	
								25'	6.7	4	2.6	-	-	43	100'	
RJS-75E	602238	0 10121 13858 2	3/4	115/230	10.0 A @ 115 V/ 5.0 A @ 230 V	1"	1" FNPT	5'	12.2	11.9	8	4.1	1.8	67.2	155.2'	12.2
								15'	8.6	8.2	6	3	-	62.5	144.4'	
								25'	4.9	4.8	4.5	-	-	59	136.3'	

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RJS-50E	11.75"	19.25"	9.0"	34	1.18	40	8	5
RJS-75E	11.75"	19.25"	9.0"	35	1.18	40	8	5

Cast Iron Shallow Well Jet Pumps



# STAINLESS STEEL SHALLOW WELL JET PUMP

## APPLICATIONS

Ideal for supply of fresh water to rural homes, farms, and cabins that have suction lifts down to 25'.

## FEATURES & BENEFITS

- **Shallow well stainless steel jet pump**  
Ideal for use in pumping at depths of 25' or less
- **Corrosion-resistant stainless steel pump housing**  
For years of service and reliability
- **Includes factory pre-set 30/50 pressure switch**  
Produces up to 50 psi with automatic shut-off
- **115 Volt heavy-duty motor**  
TEFC design with simple connection to existing power source

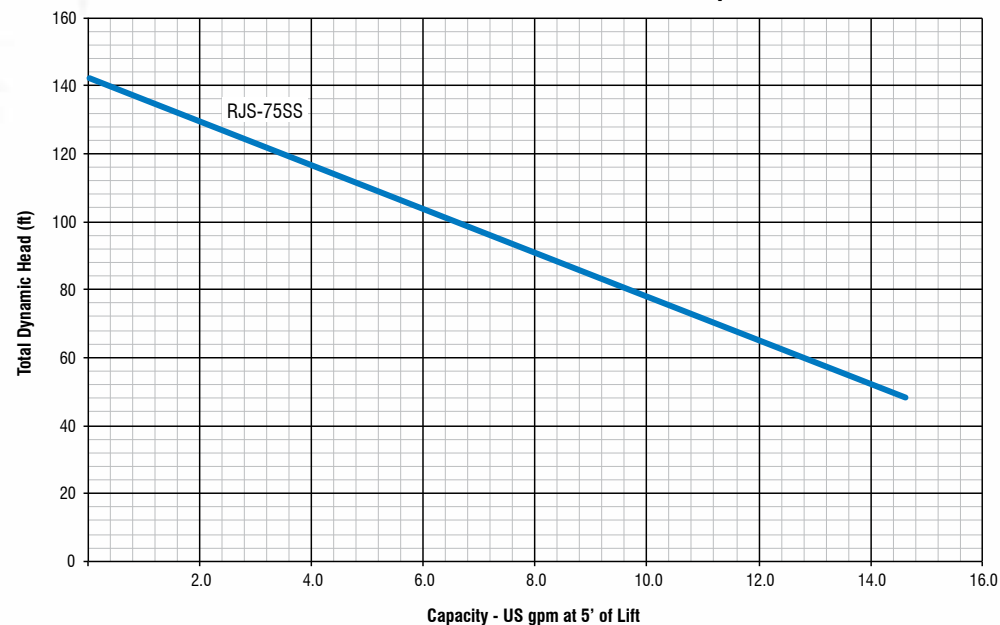


Model	Item Number	UPC	HP	Volts	Amps	Intake	Discharge	Suction Lift	Discharge Pressure (PSI)				Max Pressure PSI	Max Head	Max Flow GPM
									20	30	40	50			
									Gallons Per Minute						
RJS-75SS	602239	0 10121 14419 4	3/4	115	7.0 A @ 115 V	1"	1" FNPT	5'	14.6	11.2	7.9	4.5	64	147'	12
								10'	12.4	9.5	6.7	3.9	62	143'	
								15'	10.7	8.3	6.0	3.7	60	139'	
								20'	8.4	6.6	4.8	3.0	58	134'	
								25'	9.8	6.0	4.3	1.5	57	132'	

## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RJS-75SS	12.5"	15.5"	10.25"	21	1.15	36	9	4

Stainless Steel Shallow Well Jet Pumps





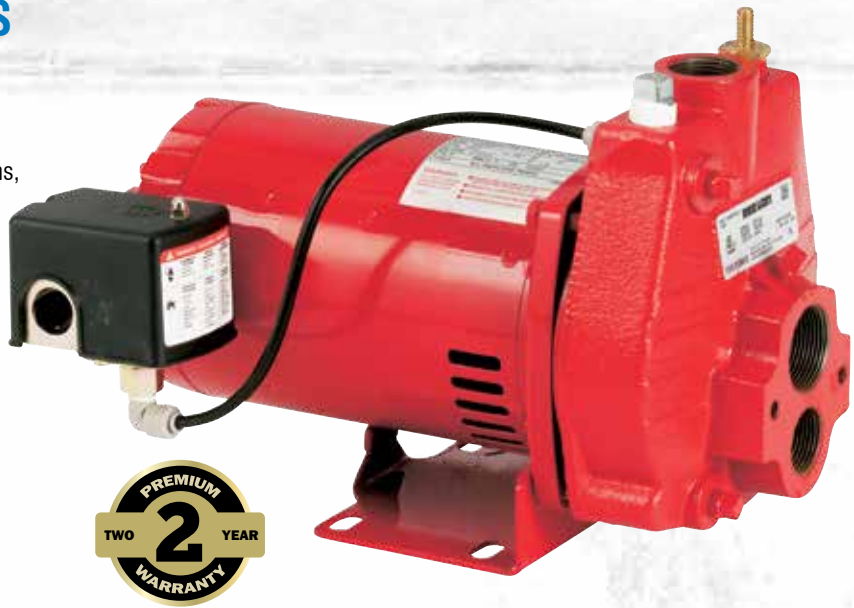
# HIGH PERFORMANCE CAST IRON CONVERTIBLE JET PUMPS

## APPLICATIONS

Ideal for the supply of fresh water to rural homes, farms, and cabins that have suction lifts down to 90'.

## FEATURES & BENEFITS

- **Convertible jet pump with deep well injector**  
Ideal for use in shallow well (less than 25') and deep well (25' to 90') applications
- **Rugged cast iron casing**  
Ideal for supplying fresh water to rural homes, farms, and cabins
- **Heavy-duty motor, 115/230 Volts**  
For years of service and reliability
- **Includes factory pre-set 30/50 pressure switch**  
Produces up to 50 psi with automatic shut-off
- **Glass-filled thermoplastic impeller and diffuser**  
For high performance and efficient water flow



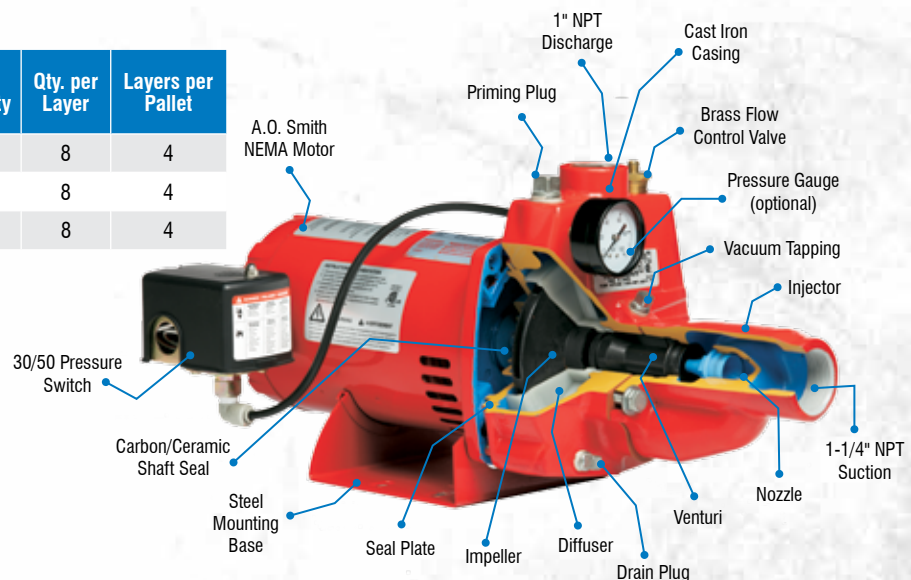
Model	Item Number	UPC	HP	Volts	Amps	Intake	Discharge	No. of Pipes	Suction Lift	Discharge Pressure (PSI)					Max Pressure PSI	Max Head	Max Flow GPM
										20	30	40	50	60			
										Gallons Per Minute							
RJC-50	602036	0 10121 12282 6	1/2	115/230	11.2 A @ 115 V / 5.6 A @ 230 V	1-1/4"	1" FNPT	1	5'	11.1	10.9	10.7	7.4	4.5	76.2	176'	11.1
								1	15'	8.1	7.9	7.7	5.9	3.1	71.7	165'	
								2	20'	-	9.2	6.5	4.5	2.9	85.0	196'	
								2	50'	-	5.8	4.0	2.4	1.3	72.0	166'	
								2	80'	-	3.4	2.2	1.0	-	59.0	136'	
RJC-75	602037	0 10121 12283 3	3/4	115/230	12.6 A @ 115 V / 6.3 A @ 230 V	1-1/4"	1" FNPT	1	5'	18.2	17.7	14.3	9.7	5.1	71.0	164'	18.2
								1	15'	12.7	12.4	12.0	7.5	3.0	66.7	154'	
								2	20'	-	9.8	6.8	4.7	3.0	86.0	199'	
								2	50'	-	6.1	4.1	2.5	1.3	73.0	169'	
								2	90'	-	3.5	2.1	1.0	-	60.0	139'	
RJC-100	602038	0 10121 12284 0	1	115/230	16.4 A @ 115 V / 8.2 A @ 230 V	1-1/4"	1" FNPT	1	5'	20.0	19.9	16.7	11.1	5.6	71.0	164'	20
								1	15'	14.5	14.1	13.6	8.7	3.3	66.7	154'	
								2	20'	-	10.5	7.3	5.2	3.6	87.0	201'	
								2	50'	-	7.2	5.0	3.4	1.9	74.0	171'	
								2	90'	-	3.4	1.9	0.7	-	56.7	131'	

## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RJC-50	10.33"	20.25"	11.5"	36	1.39	32	8	4
RJC-75	10.33"	20.25"	11.5"	37	1.39	32	8	4
RJC-100	10.33"	20.25"	11.5"	38	1.39	32	8	4



Injector Kit Included



Pressure gauge included on pump and tank system only

## PRE-CHARGED PRESSURE TANKS

### APPLICATIONS

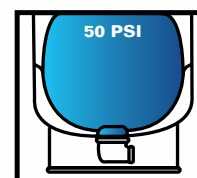
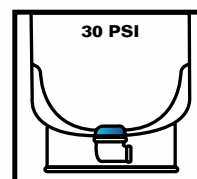
For maintaining the water pressure in a residential water pump system when the pump is not running.

### FEATURES & BENEFITS

- **ANSI/NSF Standard 61 approved**  
Assures safe, clean drinking water
- **Blended butyl rubber diaphragm system**  
Isolates the air charge from the water chamber and provides long tank life
- **Heavy-duty steel construction**  
16 gauge cold rolled steel with appliance-quality paint
- **Steel clench ring protects diaphragm from rubbing against tank wall**  
Eliminates abrasion and reduces condensation
- **Brass air valve with O-ring seal**  
Allows adjustment of air pre-charge



Model	Item Number	UPC	Gallons	Drawdown @ 30/50 PSI (gal)	Fixtures	Type	System Connect
RL2	604452	0 10121 12335 9	2.1	0.7	-	Inline	3/4" MNPT
RL4	604453	0 10121 12336 6	4.8	1.5	-	Inline	3/4" MNPT
RL8	604454	0 10121 12337 3	8.5	2.6	-	Inline	3/4" MNPT
RL6H	604529	0 10121 12126 3	5.3	1.6	1	Horizontal	3/4" MNPT
RL14H	604493	0 10121 12124 9	14	4.3	4	Horizontal	3/4" MNPT
RL14	604456	0 10121 12338 0	14	4.8	4	Vertical	1" NPT
RL20	604457	0 10121 12339 7	20	6.8	6	Vertical	1" NPT
RL33	604449	0 10121 12334 2	33	11.3	11	Vertical	1" NPT
RL44	604459	0 10121 12341 0	44	15	14	Vertical	1-1/4" NPT
RL81	604541	0 10121 12365 6	81	27.6	27	Vertical	1-1/4" NPT
RL119	604531	0 10121 12360 1	119	40.6	39	Vertical	1-1/4" NPT



### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL2	8.33"	8.33"	12.75"	5	.51	60	20	3
RL4	11.12"	11.12"	15"	10	1.07	36	12	3
RL8	13.5"	19.5"	13.5"	15.4	2.06	18	6	3
RL6H	10.5"	18"	12.25"	13.3	1.34	18	6	3
RL14H	15.75"	21.25"	17.25"	27	3.34	8	4	2
RL14	16.5"	16.5"	23"	29	3.62	8	4	2
RL20	16.75"	16.75"	30"	35	4.87	4	4	1
RL33	16.3"	16.3"	44"	55	6.77	4	4	1
RL44	21.3"	21.3"	38.25"	66	10.04	2	2	1
RL81	21.5"	21.5"	60"	101	16.05	2	2	1
RL119	26.75"	26.75"	61.5"	160	25.47	1	1	1





## PUMP & TANK SYSTEMS






### APPLICATIONS

Ideal for the supply of fresh water to rural homes, farms, and cabins where compact system size and ease of installation are most important.

### FEATURES & BENEFITS

- Jet pump and pre-charged pressure tank are factory assembled and ready to install
- Pump casing is made of rugged cast iron
- Pre-charged steel tank has a high grade diaphragm water chamber - 5.3 to 14 gallons
- Low profile, compact horizontal pressure tank
- Injector, foot valve, and pressure gauge included
- 1-1/4" NPT suction and 1" NPT discharge
- 30/50 pressure switch
- Can be set for use with 115 Volts or 230 Volts



Model	Warranty	Item Number	UPC	HP	Gallons	Volts	Amps	Intake	Discharge	Suction Lift	No. of Pipes	Discharge Pressure (PSI)						Max Pressure PSI	Max Head	Max Flow GPM
												20	30	40	50	60				
												Gallons Per Minute								
RJS-50E/RL6H		602236	0 10121 13468 3	1/2	5.3	115/230	6.5 A @ 115 V / 3.25 A @ 230 V	1"	1" FNPT	5'	1	11.8	8.3	4.3	2.4	-	52.0	120'	11.8	
										15'		9.6	5.8	3.2	1.4	-	48.0	110'		
										25'		6.7	4.0	2.6	-	-	43.0	100'		
RJS-50/RL6H		602099	0 10121 12241 3	1/2	5.3	115/230	11.2 A @ 115 V / 5.6 A @ 230 V	1-1/4"	1" FNPT	5'	1	12.8	12.3	11.2	6.9	2.0	64.2	148'	12.8	
										15'		9.8	9.6	9.4	4.7	-	59.9	138'		
										25'		5.6	5.5	5.3	2.3	-	55.5	128'		
RJS-50/RL14H		602014	0 10121 12230 7	1/2	14	115/230	11.2 A @ 115 V / 5.6 A @ 230 V	1-1/4"	1" FNPT	5'	1	12.8	12.3	11.2	6.9	2.0	64.2	148'	12.8	
										15'		9.8	9.6	9.4	4.7	-	59.9	138'		
										25'		5.6	5.5	5.3	2.3	-	55.5	128'		
RJC-50/RL6H		602102	0 10121 12240 6	1/2	5.3	115/230	11.2 A @ 115 V / 5.6 A @ 230 V	1-1/4"	1" FNPT	5'	1	11.1	10.9	10.7	7.4	4.5	76.2	176'	11.1	
										15'	1	8.1	7.9	7.7	5.9	3.1	71.7	165'		
										20'	2	-	9.2	6.5	4.5	2.9	85.0	196'		
										50'	2	-	5.8	4.0	2.4	1.3	72.0	166'		
										80'	2	-	3.4	2.2	1.0	-	59.0	138'		
RJC-50/RL14H		602063	0 10121 12239 0	1/2	14	115/230	11.2 A @ 115 V / 5.6 A @ 230 V	1-1/4"	1" FNPT	5'	1	11.1	10.9	10.7	7.4	4.5	76.2	176'	11.1	
										15'	1	8.1	7.9	7.7	5.9	3.1	71.1	165'		
										20'	2	-	9.2	6.5	4.5	2.9	85.0	196'		
										50'	2	-	5.8	4.0	2.4	1.3	72.0	166'		
										80'	2	-	3.4	2.2	1.0	-	59.0	138'		

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RJS-50E / RL6H	25.25"	13.5"	25.5"	46	5.03	4	4	1
RJS-50 / RL6H	24.6"	14"	26"	53	5.18	4	4	1
RJS-50 / RL14H	23.5"	17"	32"	67	7.40	4	4	1
RJC-50 / RL6H	24.6"	12.6"	27"	54	4.84	4	4	1
RJC-50 / RL14H	23.5"	17"	32"	74	7.40	4	4	1

## 4" SUBMERSIBLE WELL PUMPS

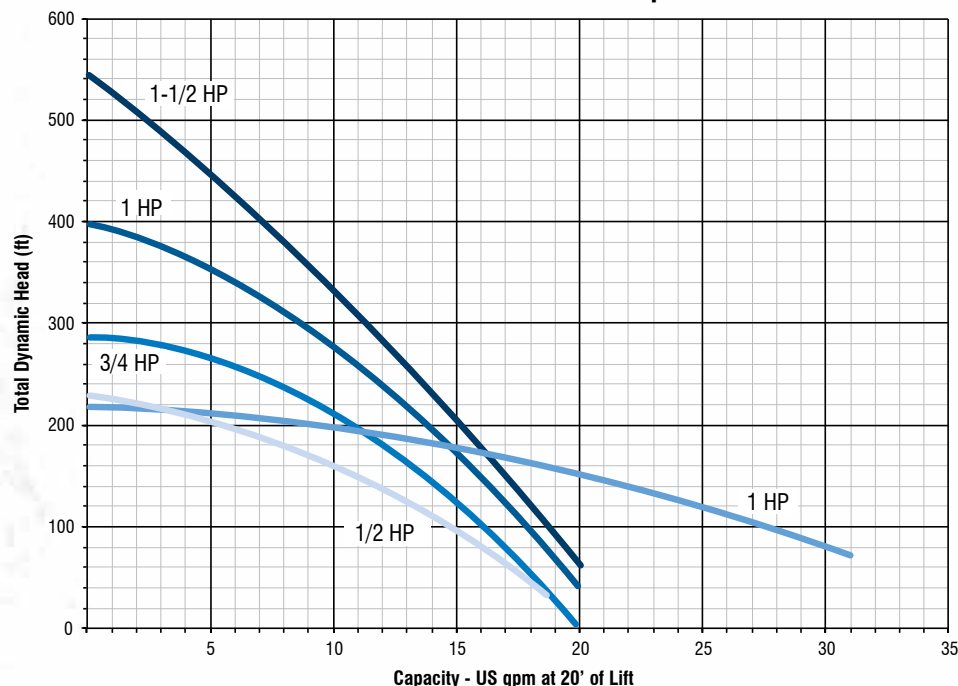
### APPLICATIONS

Ideal for the supply of fresh water to rural homes, farms, and cabins that have 4" and greater diameter drilled wells to depths of 250'.

### FEATURES & BENEFITS

- Powered by industry standard 2- or 3-wire motors
- Thermoplastic discharge and motor bracket
- Stainless steel pump shell
- Built-in suction screen and check valve
- 12 gpm and 22 gpm models available
- Control box included with all 3-wire pumps (1/2 hp to 1 hp)

**4" Submersible Well Pumps**



### Carton Specifications

Model	Item Number	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
<b>Pumps only</b>									
RL12G05-2W1V	14942401	4.6"	4.6"	28.5"	21	.35	100	10	10
RL12G05-2W2V	14942402	4.6"	4.6"	29"	21	.36	100	10	10
RL12G07-2W2V	14942403	4.6"	4.6"	29"	24	.36	100	10	10
RL12G10-2W2V	14942404	4.6"	4.75"	29"	28	.37	100	10	10
RL12G05-3W2V	14942405	4.6"	5.75"	38.25"	25	.59	80	8	10
RL12G07-3W2V	14942406	4.6"	5.75"	38.25"	28	.59	80	8	10
RL12G10-3W2V	14942407	4.75"	6"	43.75"	32	.72	60	6	10
RL12G15-3W2V	14942408	4.6"	4.6"	39.25"	36	.48	100	10	10
RL22G10-3W2V	14942409	4.6"	5.75"	43.75"	31	.67	70	7	10
<b>Sub-Pacs</b>									
RL12G05-2W2V-SP (USA)	14942410	9.25"	12.75"	31.75"	52	2.17	15	5	3
RL12G07-2W2V-SP (USA)	14942411	9.25"	12.75"	31.75"	56	2.17	15	5	3
RL12G05-2W1V-SP (CAN)	14942412	9.25"	12.75"	31.75"	52	2.17	15	5	3
RL12G05-2W2V-SP (CAN)	14942413	9.25"	12.75"	31.75"	52	2.17	15	5	3
RL12G07-2W2V-SP (CAN)	14942414	9.25"	12.75"	31.75"	56	2.17	15	5	3

Nomenclature: RL = Red Lion, 12G= 12 Gallon, ## = HP (05=1/2, 07=3/4, 10=1, 15=1.5), # W = Number of Wires, # V = Voltage (1=115, 2=230), SP = Sub-Pac  
 Example: RL12G05-2W1V = 12 Gallon, 1/2 hp, 2-Wire, 115 Volt



Model	Item Number	UPC	HP	Wires	Volts	Amps	Depth to water	Discharge Pressure PSI										Discharge	Shut- Off	Max Flow GPM	Availability
								0	10	20	30	40	50	60	70	80					
								Gallons Per Minute													
RL12G05-2W1V RL12G05-2W1V-SP (CAN)	14942401	0 10121 14177 3	1/2	2	115	10	20'	-	19	18	16	15	14	12	10	6	1-1/4" FNPT	231'	12		
		40'					19	18	16	15	14	13	11	7	2						
		60'					18	17	16	14	13	11	7	3	-						
		80'					17	16	15	13	11	8	3	-	-						
		100'					16	15	13	11	8	4	-	-	-						
		140'					14	12	9	5	-	-	-	-	-						
							200'	7	2	-	-	-	-	-	-						
RL12G05-2W2V RL12G05-3W2V*	14942402	0 10121 14178 0	1/2	2 3	230	6	20'	-	19	18	16	15	14	12	10	6	1-1/4" FNPT	231'	12	USA only Canada only	
	14942405	0 10121 14181 0					40'	19	18	16	15	14	13	11	7	2					
		60'					18	17	16	14	13	11	7	3	-						
		80'					17	16	15	13	11	8	3	-	-						
		100'					16	15	13	11	8	4	-	-	-						
		140'					14	12	9	5	-	-	-	-	-						
							200'	7	2	-	-	-	-	-	-						
RL12G07-2W2V RL12G07-3W2V*	14942403	0 10121 14179 7	3/4	2 3	230	8	20'	-	20	18	17	16	16	15	14	12	1-1/4" FNPT	291'	12	USA only Canada only	
		40'					20	19	17	17	16	15	14	13	11						
		60'					19	18	17	16	15	14	13	11	9						
		80'					18	17	16	15	14	13	11	9	6						
		100'					17	16	15	14	13	12	9	6	3						
		140'					15	15	14	13	10	7	4	-	-						
							200'	13	11	8	5	1	-	-	-	-					
							240'	9	6	2	-	-	-	-	-	-					
RL12G10-2W2V RL12G10-3W2V*	14942404 14942407	0 10121 14180 3 0 10121 14183 4	1	2 3	230	9.8	20'	-	-	20	19	18	17	16	16	15	1-1/4" FNPT	399'	12		
							40'	-	20	19	18	17	16	16	15	14					
							60'	20	19	18	17	17	16	15	14	13					
							80'	19	18	17	17	16	15	14	13	12					
							100'	18	17	17	16	15	14	13	12	11					
							140'	17	16	16	15	14	13	12	10	8					
							200'	15	14	13	11	11	9	7	5	2					
							240'	14	12	11	10	8	6	3	-	-					
							280'	12	10	8	6	4	1	-	-	-					
							300'	10	9	7	4	1	-	-	-	-					
							340'	7	5	2	-	-	-	-	-	-					
380'	3	-	-	-	-	-	-	-	-												
RL12G15-3W2V	14942408	0 10121 14184 1	1-1/2	3	230	10	20'	-	-	-	20	19	18	17	17	16	1-1/4" FNPT	545'	12		
							40'	-	-	20	19	18	18	17	17	16					16
							60'	-	20	19	18	18	17	17	16	16					
							80'	20	19	18	18	17	17	16	16	15					
							100'	19	18	18	17	17	16	16	15	15					
							140'	18	17	17	16	16	15	15	14	14					
							200'	17	16	16	15	15	14	13	13	12					
							240'	16	15	15	14	14	13	12	11	10					
							280'	15	14	14	13	12	11	10	9	8					
							300'	14	14	13	12	12	10	9	8	6					
							340'	13	13	12	11	10	8	7	5	3					
							380'	12	11	10	9	7	5	3	1	-					
							440'	9	8	6	4	2	-	-	-	-					
							500'	5	3	-	-	-	-	-	-	-					
RL22G10-3W2V*	14942409	0 10121 14185 8	1	3	230	9.8	20'	-	-	-	31	28	26	23	19	11	1-1/4" FNPT	221'	22		
							40'	-	-	32	28	26	24	20	12	1					
							60'	-	33	29	16	24	20	14	3	-					
							80'	-	29	27	24	21	15	4	-	-					
							100'	30	27	25	22	16	6	-	-	-					
							140'	25	23	18	9	-	-	-	-	-					
200'	13	2	-	-	-	-	-	-	-												

\* Includes control box.

SP indicates Sub-pac which includes factory spliced power cable, control center, pressure switch and gauge, pressure relief valve, and tank cross.

### Control Boxes for 4" Submersible Well Pumps

Model	Item Number	UPC	HP	Volts	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Master Pack Qty.	Pallet Quantity	Qty. per Layer	Layers per Pallet
RLCB05-115	640188	0 10121 12203 1	1/2	115	8.75"	5.25"	3.25"	3	.09	10	45 Master Packs	9 Master Packs	5
RLCB05-230	640189	0 10121 12204 8	1/2	230	8.75"	5.35"	3.25"	3	.09	10	45 Master Packs	9 Master Packs	5
RLCB07-230	640190	0 10121 13096 8	3/4	230	9.0"	5.25"	3.0"	3	.08	10	45 Master Packs	9 Master Packs	5
RLCB10-230	640191	0 10121 13097 5	1	230	9.0"	5.5"	3.5"	3	.10	10	45 Master Packs	9 Master Packs	5
RLCB15-230	640222	0 10121 13173 6	1-1/2	230	11.5"	8.25"	6.25"	6	.34	10	45 Master Packs	9 Master Packs	5

For cable size information please see the technical data section



# 1-2-3 EASY GUIDE TO PUMP & TANK SELECTION

1

## DEPTH TO THE PUMPING WATER LEVEL

- 0 – 25 feet** Shallow well or convertible jet pump, install in shallow (single pipe) configuration.
- 25 – 90 feet** Convertible jet pump, installed in deep (two pipe) configuration or deep well submersible pump.
- 0 – 250 feet** Deep well submersible pump.
- 250+ feet** Call pump hotline: 1-888-956-0000

"Pumping water level" is the depth to the water while the well is being pumped. It is usually deeper than the depth to the water when the pump is not running. For a lake or cistern installation, it is the depth to the surface of the water.

For **Jet pumps**, it is the vertical distance from the pumping water level to the suction opening of the pump.

For **Submersible pumps**, it is the vertical distance from the pumping water level to the point of water usage.

New installation information is available on the **Well Driller's Report**. For replacement installations, use the equivalent style and horsepower pump, providing it was suitable when it was operational.

**NOTE:** A foot valve or check valve is required for proper operation of any system. The suction line must extend at least 5' below the pumping water level and be at least 10' above the well bottom.

## PUMP CHART

Read across the top of the chart for correct pumping water level in feet. Read down the side for correct flow required (gpm). The letter(s) correspond to the minimum recommended pump options. Higher horsepower models of the same categories may be substituted for jet pumps.

Flow Required (GPM)	Pumping Water Level in Feet								
	5	15	25	50	80	100	150	200	250
3	A,D	A,D	A,D,G	D,G	D,G	G	G,H	H,I	I
4	A,D	A,D	A,D,G	D,G	E,G	G,H	G,H	H,I	I
5	A,D	A,D	A,E,G	D,G	F,G	G,H	G,H	H,I	I
6	A,D	A,D	B,E,G	D,G	G	G,H	H	I	I
7	A,D	A,D	B,E,G	F,G	G,H	G,H	H	I	I
8	A,D	A,E	C,F,G	G	G,H	G,H	H	I	I
9	A,D	A,E	C,G	G	G,H	G,H	I	I	J
10	A,D	B,E	C,G	G,H	G,H	G,H	I	I	J
11	A,E	B,E	G	G,H	H	H	I	J	J
12	A,E	C,E	G	G,H	H	H	I,J	J	J
13	B,E	C,F	G	G,H	H,I	I,J	J	J	J
14	B,E	C,F	G	I	I,J	J	J	J	J
15	B,E	C		I	J				
16	C,E	C							
17	C,E	C							

**NOTE:** For depths greater than 250', consult tech support.

Shallow Well Jet Pumps	Convertible Jet Pumps	Deep Well Submersible Pumps
A = RJS-50 ½ hp	D = RJC-50 ½ hp	G = RL12G05 ½ hp
B = RJS-75 ¾ hp	E = RJC-75 ¾ hp	H = RL12G07 ¾ hp
C = RJS-100 1 hp	F = RJC-100 1 hp	I = RL12G10 1 hp
		J = RL12G15 1½ hp



2

## HOW MUCH WATER IS REQUIRED

The gpm (gallons per minute) of the pump must equal the total number of fixtures. Fixtures include all faucets, toilets, and water consuming appliances (do not include water treatment appliances, such as a hot water tank or water filter).

Example: A house with one full bathroom (sink, tub/shower, toilet), kitchen sink, basement sink, outside faucet, washing machine, and dishwasher would require 8 gpm.

3

## MINIMUM WELL DIAMETER

2½" – Jet pumps in shallow well applications (depth less than 25') should be installed using 1¼" suction piping with a foot valve.

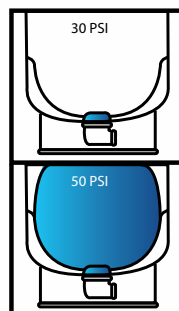
4" – Convertible jet pumps used in deep well applications (depth greater than 25') and deep well submersible pumps.

## TANK CHART

**NOTE:** Refer to Step 2 above.

The easy way to size a tank is take the gpm system requirement that you determined in Step 2, multiply by 3 and go to the next largest tank size.

**Example:** 8 gpm x 3 = 24 gallons – therefore use an RL33 tank.



Tank Capacities	Total Tank Volume (gal)	Drawdown @ 30/50 PSI (gal)
RL2	2.1	0.7
RL4	4.8	1.5
RL6H	5.3	2.6
RL8	8.5	1.6
RL14H	14	4.3
RL14	14	4.8
RL20	20	6.8
RL33	33	11.3
RL44	44	15
RL81	81	27.6
RL119	119	40.6

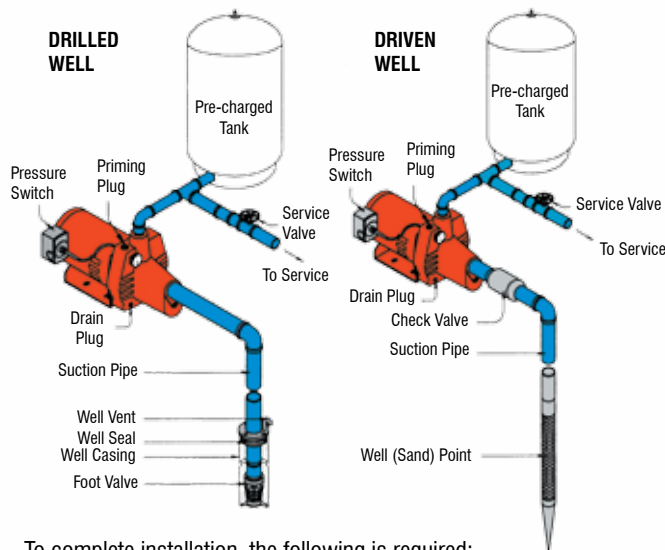


## TYPICAL INSTALLATIONS

### SHALLOW WELL JET PUMP

#### Down to 25 feet

Suitable for applications where the pumping water level does not exceed 25'. Requires a single 1 1/4" suction pipe. May be used in well 2" or larger in diameter.



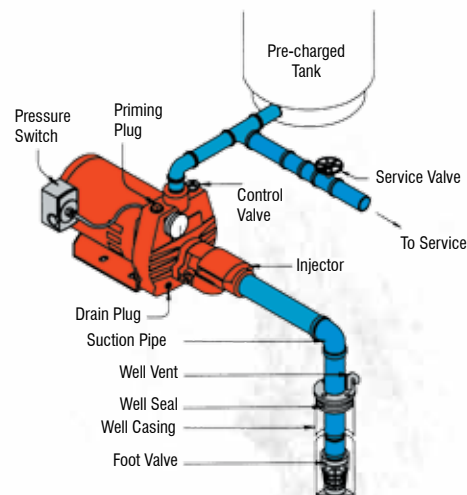
To complete installation, the following is required:

- Jet pump
- Pressure tank
- Pump to tank fittings
- 1 1/4" suction piping
- Foot valve or check valve

### CONVERTIBLE JET PUMP

#### Shallow well configuration – down to 25 feet

Suitable for applications where the pumping water level does not exceed 25'. Requires a single 1 1/4" suction pipe. May be used in wells 2 1/2" or larger in diameter.



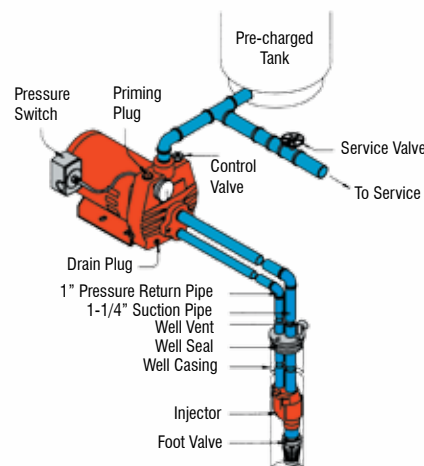
To complete installation:

- Jet pump, which includes: pressure switch, flow control valve, and injector (installed on the pump)
- Pressure tank
- Pump to tank fittings
- 1 1/4" suction piping
- Foot valve or check valve (for driven well)

### CONVERTIBLE JET PUMP

#### Deep well configuration – down to 90 feet

Suitable for applications where the pumping water level does not exceed 90'. Requires a double suction pipe. May be used in wells 4" or larger in diameter.



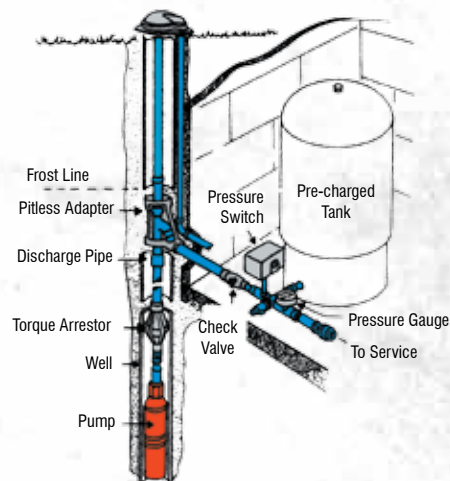
To complete installation:

- Jet pump, which includes: pressure switch, flow control valve, and injector (installed on the pump)
- Pressure tank
- Pump to tank fittings
- 1 1/4" suction piping and 1" pressure return piping
- Foot valve

### DEEP WELL SUBMERSIBLE PUMP

#### Down to 250 feet

Suitable for applications where the pumping water level does not exceed 250'. Requires a double suction pipe. May be used in wells 4" or larger in diameter.



To complete installation:

- Submersible pump sub-pac, which includes pressure switch, pressure gauge, service tee, relief valve, sub cable, and built-in check valve
- Pressure tank
- Torque arrester
- Well seal or pitless adapter
- 1" discharge piping



## LAWN & IRRIGATION PRODUCTS



## Why do you need a sprinkler pump?

Sprinkler pumps transport water from a lake or pond to supply irrigation for a lawn or garden. Because they are designed to move large volumes of water, sprinkler pumps are also useful in high-volume applications such as filling pools, water transfer, and boosting household water pressure.

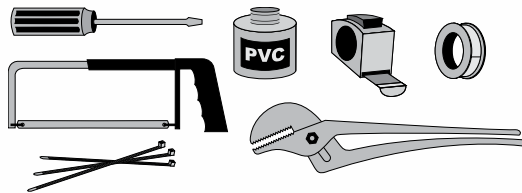
## What size sprinkler pump do you need?

For pump replacement, simply select the same horsepower (hp) as your current pump.

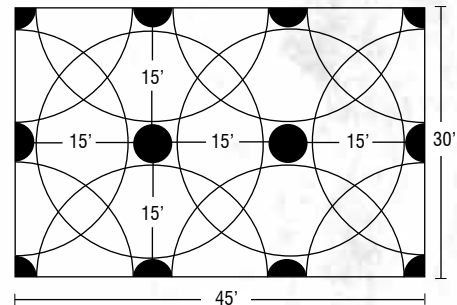
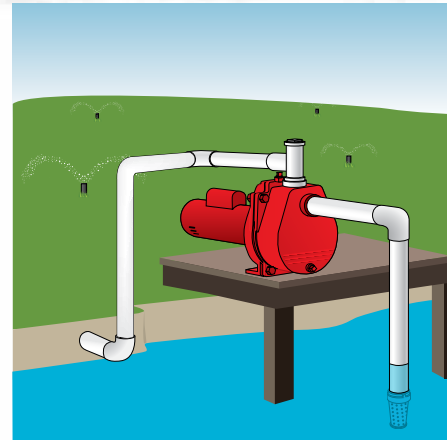
When selecting a new sprinkler pump, use the following steps to easily determine the needed size:

Suction lift and the number of sprinkler heads operating at any given time are the key determining factors in selecting a sprinkler pump. Determine the number of heads and multiply them by 3. The sum (gpm requirement) should be compared with the pump performance chart found on the pump carton. Find the pump that will deliver your gpm requirement at the suction lift distance determined performing at 30 psi.

### Tools needed

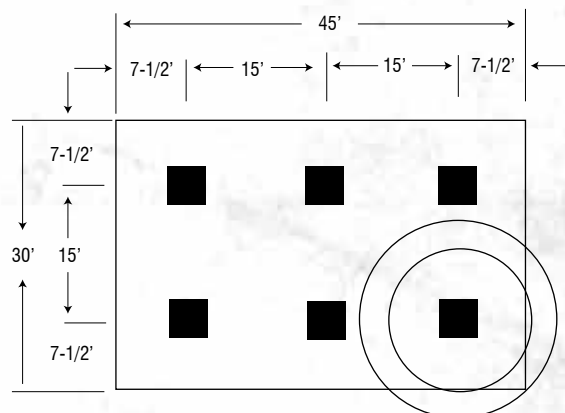


## Typical installations



### Example 1:

(of a typical front yard) Using full, half, and quarter circle patterns. Advantages: Full coverage with no water on sidewalks, using 12 sprinklers.



### Example 2:

Alternate Plan (more economical) using only 6 sprinklers, requiring an "overthrow", if this is no problem on sidewalk or street.



## CAST IRON SPRINKLER UTILITY PUMP

### APPLICATIONS

Ideal for pressure boosting, sprinkler systems, and general purpose applications where portability is important.

### FEATURES & BENEFITS

- 115 Volt motor with 8' power cord
- Rugged cast iron construction
- Steel handle for portability
- Self-priming to 25'
- Garden hose adapter included

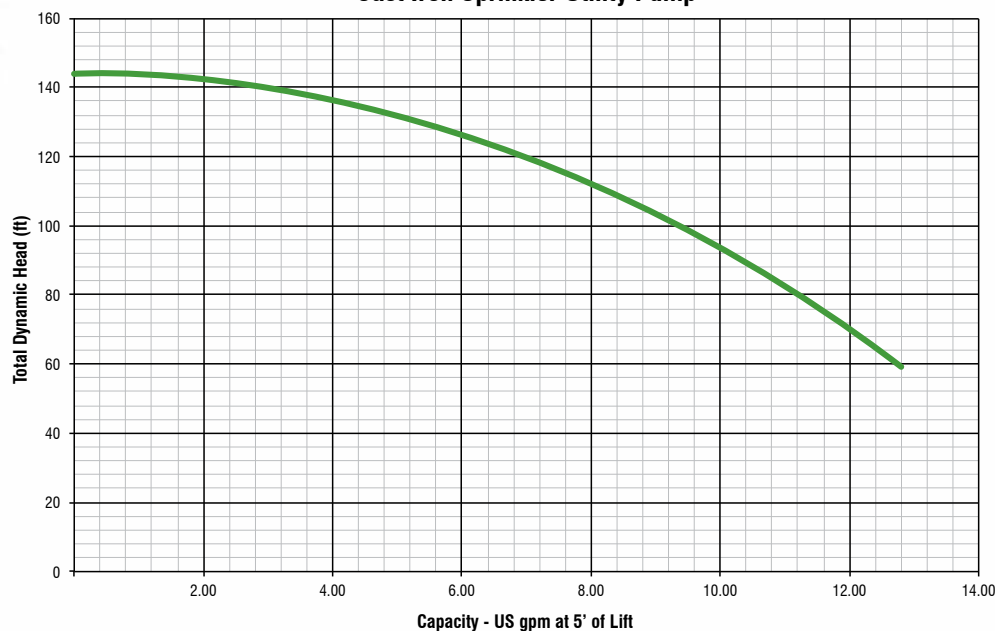


Model	Item Number	UPC	HP	Volts	Amps	Cord Length	Intake	Discharge	Suction Lift	Discharge Pressure (PSI)										Max Pressure PSI	Max Flow GPM
										20	25	30	35	40	45	50	55	60			
										Gallons Per Minute											
RJSE-50	614430	0 10121 12456 1	1/2	115	12.4 A @ 115 V	8'	1-1/4" FNPT	1" FNPT	5'	12.8	12.5	12.3	12.1	11.2	9.5	6.9	4.3	2.0	64.2	12.8	
									10'	11.5	11.3	11.0	10.8	10.4	8.5	6.0	3.4	1.0	62.0		
									15'	9.8	9.7	9.6	9.5	9.4	7.3	4.7	2.0	-	59.9		
									20'	8.3	8.1	7.8	7.7	7.6	5.7	3.5	1.0	-	57.7		
									25'	5.6	5.55	5.5	5.4	5.3	4.1	2.3	0.2	-	55.5		

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RJSE-50	10"	20.25"	11.5"	36	1.35	32	8	4

Cast Iron Sprinkler Utility Pump



# STAINLESS STEEL SPRINKLER UTILITY PUMP

## APPLICATIONS

Ideal for pressure boosting, sprinkler systems, and general purpose applications where portability and corrosion-resistance is important.

## FEATURES & BENEFITS

- **Self-priming utility pump**  
Designed to lift water up to 25'
- **Corrosion-resistant stainless steel pump housing**  
Ideal for operating lawn sprinklers, pressure boosting, and other general purpose applications
- **Heavy-duty 3/4 hp 115 Volt motor**  
For years of service and reliability
- **Glass-filled thermoplastic impeller and diffuser**  
For high performance and efficient water flow
- **Power cord, carry handle, and garden hose adapter included**  
For convenience and portability

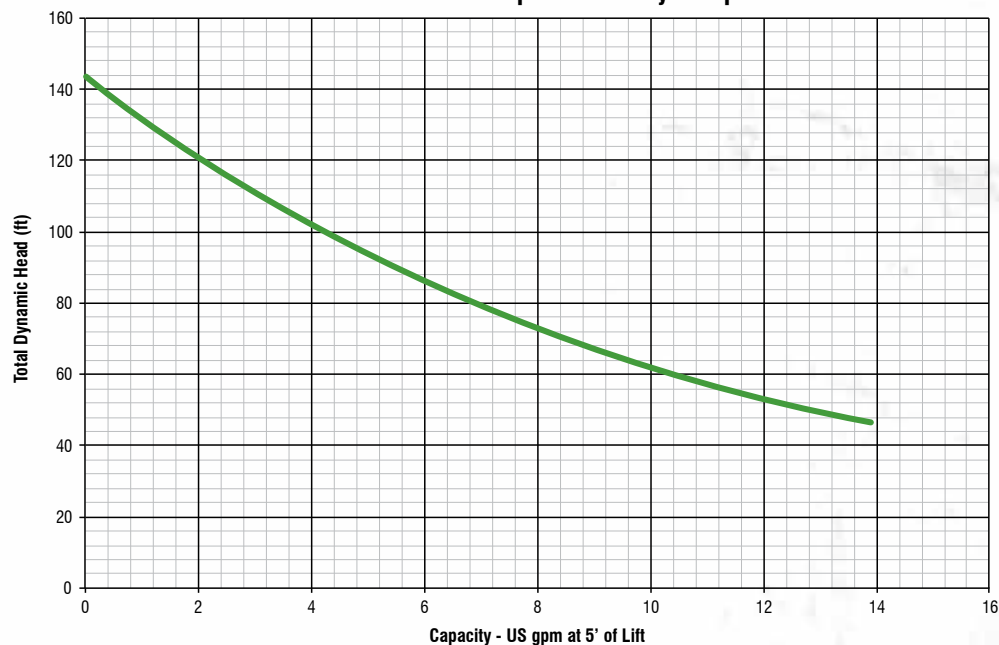


Model	Item Number	UPC	HP	Volts	Amps	Cord Length	Intake	Discharge	Discharge Pressure PSI at 5' Lift					Max Flow at 5' Suction Lift	Max Pressure PSI	Max Head FT
									20	30	40	50	60			
									Gallons Per Minute							
RJSE-75SS	614432	0 10121 14415 6	3/4	115	7.0 A	8'	1"	1" FNPT	13.9	8.5	5.3	2.5	0.3	17 GPM	64	147

## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RJSE-75SS	8.33"	14.33"	10"	21	0.69	48	12	4

Stainless Steel Sprinkler Utility Pump



# CENTRIFUGAL SELF-PRIMING SPRINKLER PUMPS

## APPLICATIONS

Ideal for both residential and commercial lawn and turf sprinkling systems.

## FEATURES & BENEFITS

- Rugged cast iron casing and pump base
- High efficiency thermoplastic impeller and diffuser
- BI models are configured with a brass impeller which is recommended for more demanding applications such as weir feeders\*
- 2" NPT suction and 1-1/2" NPT discharge
- Self-priming to 25'
- Maximum pressure to 47 psi
- Flow rates to 89 U.S. gpm
- RLSP Series can be set for use with 115 Volts or 230 Volts

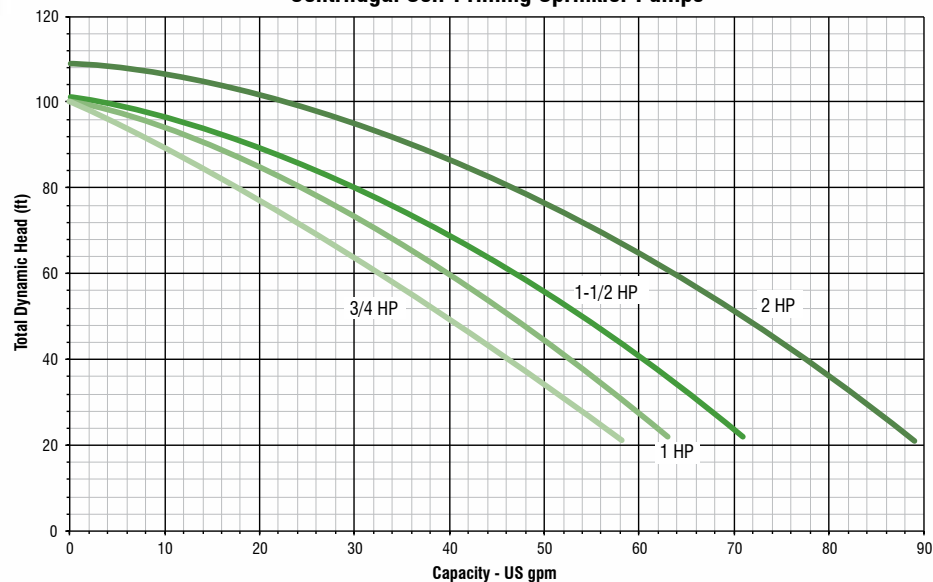


Model	Item Number	UPC	HP	Volts	Amps	Intake	Discharge	Discharge Pressure (PSI) at 5' Lift				Max Pressure PSI	Max Flow GPM
								10	20	30	40		
								Gallons Per Minute					
RLSP-75	614670	0 10121 12485 1	3/4	115/230	12.6 A @ 115 V / 6.3 A @ 230 V	2" NPT	1-1/2" NPT	58	46	29	7	43	58
RLSP-100	614671	0 10121 12486 8	1	115/230	16.4 A @ 115 V / 8.2 A @ 230 V	2" NPT	1-1/2" NPT	63	54	38	11	45	63
RLSP-150	614672	0 10121 12487 5	1-1/2	115/230	17.4 A @ 115 V / 8.7 A @ 230 V	2" NPT	1-1/2" NPT	71	60	44	15	44	71
RLSP-200	614673	0 10121 12488 2	2	115/230	20 A @ 115 V / 10 A @ 230 V	2" NPT	1-1/2" NPT	89	75	60	36	47	89
*RLSP-150-BI	614675	0 10121 14089 9	1-1/2	115/230	17.4 A @ 115 V / 8.7 A @ 230 V	2" NPT	1-1/2" NPT	71	60	44	15	41	71
*RLSP-200-BI	614676	0 10121 14090 5	2	115/230	20 A @ 115 V / 10 A @ 230 V	2" NPT	1-1/2" NPT	89	75	60	36	45	89

## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RLSP-75	11.5"	20.5"	13"	54	1.77	18	6	3
RLSP-100	11.5"	20.5"	13"	57	1.77	18	6	3
RLSP-150	11.5"	20.5"	13"	60	1.77	18	6	3
RLSP-200	11.5"	20.5"	13"	63	1.77	18	6	3
RLSP-150-BI	11.5"	20.5"	13"	61	1.77	18	6	3
RLSP-200-BI	11.5"	20.5"	13"	64	1.77	18	6	3

Centrifugal Self-Priming Sprinkler Pumps





## CAST IRON INDUSTRIAL SPRINKLER PUMP

### APPLICATIONS

Ideal for both large residential properties and commercial lawn and turf sprinkling systems.

### FEATURES & BENEFITS

- **Heavy-duty iron casing, diffuser, and seal plate**  
For years of service and reliability
- **High efficiency cast iron impeller and diffuser**  
For high-performance and efficient water flow
- **2" suction and 2" discharge**  
Helps to prevent debris from clogging impellers and maintain full-flow performance
- **Self-priming to 25'**  
No additional priming required after initial fill



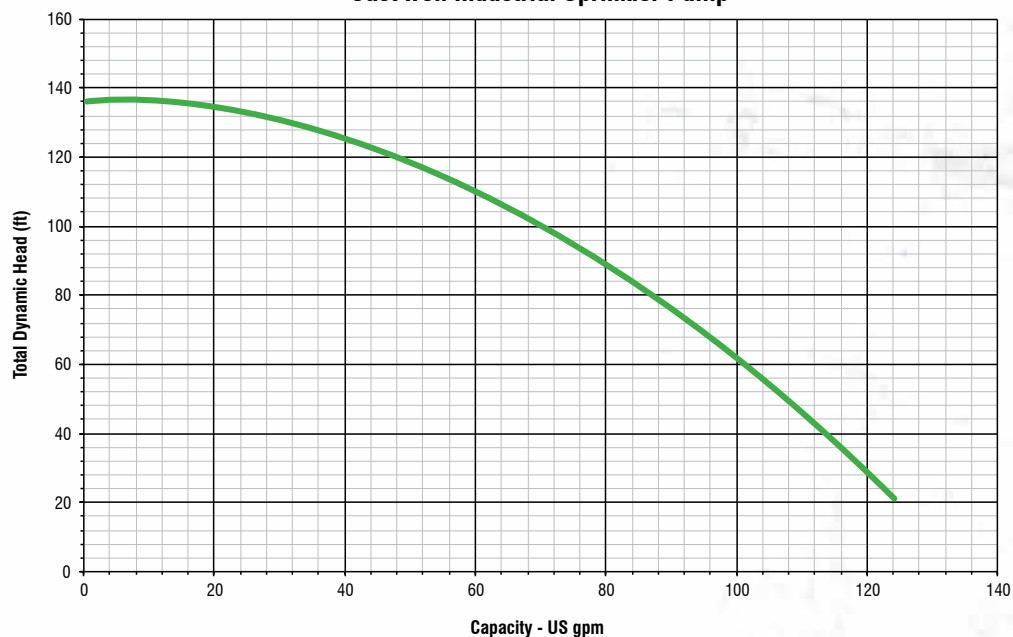
Model	Item Number	UPC	HP	Volts	Intake	Discharge	Discharge Pressure (PSI) at 5' Lift								Max Pressure PSI	Max Flow GPM
							10	20	30	40	45	50	55			
							Gallons Per Minute									
RLHE-300	614481	0 10121 12461 5	3	230	2" NPT	2" NPT	124	110	95	77	67	54	36	59	124	

### Dimensions

Model	Product Specifications				Product Including Pallet							
	Length	Width	Height	Weight (lbs)	Length	Width	Height	Weight (lbs)	Cu. Ft.	Max. Pallet Qty	Qty per Layer	Layers Per Pallet
RLHE-300	9.5"	25"	14"	134	24"	32"	19.5"	152	9.56	2	2	1

This unit is sent without a carton and bolted down to a 24" x 32" pallet.  
Two individual pallets can be mounted to a 48" x 40" pallet.

Cast Iron Industrial Sprinkler Pump



A black and white photograph of a flooded residential driveway with a house and palm trees in the background. Three Red Lion sump pumps are positioned in the foreground on a red rectangular mat. The pump on the left is a vertical stainless steel model with a black float switch. The pump in the center is a red horizontal model with a black float switch. The pump on the right is a red vertical model with a black float switch. All three pumps have the 'RED LION' logo on their side.

## SUMP PRODUCTS

## What does a sump pump do?

A sump pump removes standing water from the sump basin in a basement or crawl space. When the water reaches a certain level, the sump pump turns on and removes the water through a discharge pipe or hose. A sump pump can also be used in other applications for general dewatering, storm shelters, and performing emergency water transfer. Installing a sump pump is easy and can be completed using simple household tools in about 30 minutes.

## Questions before selecting your pump

### 1. What type of pump do you currently have?

**Pedestal Sump Pump** – Although effective in the application, in heavy rain or flooding situations, the motor can be submerged as it is exposed above the sump basin. They can easily be replaced by a submersible pump.



**Submersible Sump Pump** - These pumps are submerged under water. A submersible pump can replace a pedestal pump and is more efficient.

### 2. What is the size of your current pump?

For the same size pump as the one you have, check the identification plate to determine horsepower (hp).

## Information to consider when choosing your sump pump

### Horsepower

You will want to choose a pump that has at least the same horsepower as your current pump. To provide superior protection against heavy rain or flooding situations, step up in horsepower for more peace of mind.

HP	Light	Average	High Volume
	1/4	1/3	1/2

### Type of Switch

There are two types of switches that Red Lion offers on their sump pumps. Both offer reliability and effectiveness and provide efficient service in moving large volumes of water.



**Tethered Float Switch** – The tethered float switch is a buoy device attached with a cord that raises and lowers with the water level, activating a switch inside the pump telling it to turn on, drain the water, and then turn off once water level has subsided.

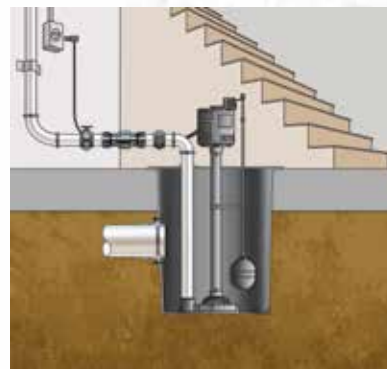
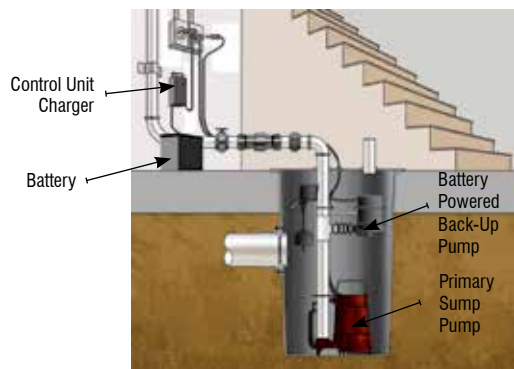


**Vertical Float Switch** – The vertical float switch is a buoy device attached with a rod that raises and lowers with the water level; activating a switch attached outside the pump telling it to turn on, drain the water and then turn off once the water level has subsided. This style allows for installation in confined areas.

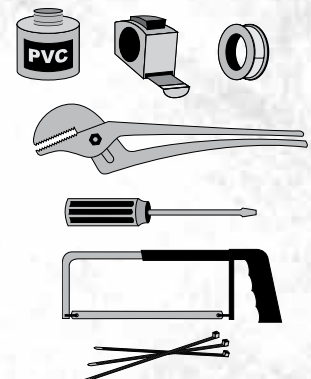
### Pump Housing

Depending on the model, Red Lion pump housings are constructed with reinforced thermoplastic, cast iron, or stainless steel. While all models feature quality material and workmanship, the reinforced thermoplastic housing is corrosion- and rust-resistant; the cast iron housing is stronger, heavier, and more durable. Our premium stainless steel models combine corrosion resistance with the strength and durability of the cast iron housing and features the longest warranty.

## Typical Installation



### Tools needed





# THERMOPLASTIC SUMP PUMPS

## APPLICATIONS

Ideal for average-to high-volume water removal in residential spaces such as basements and crawl spaces.

## FEATURES & BENEFITS

- Automatic submersible sump pumps
- 1-1/2" FNPT discharge with 1-1/4" FNPT adapter included
- Piggyback float switch
- PSC motor and closed vane impeller design
- Double seal system
- 8' cord

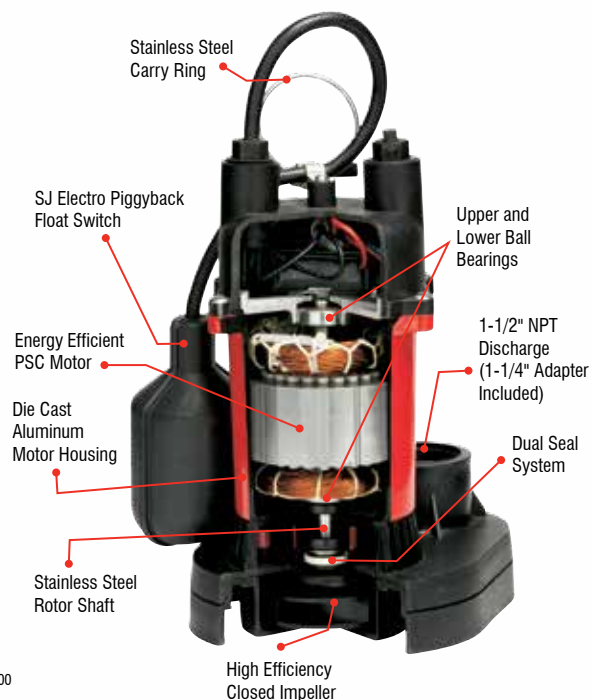
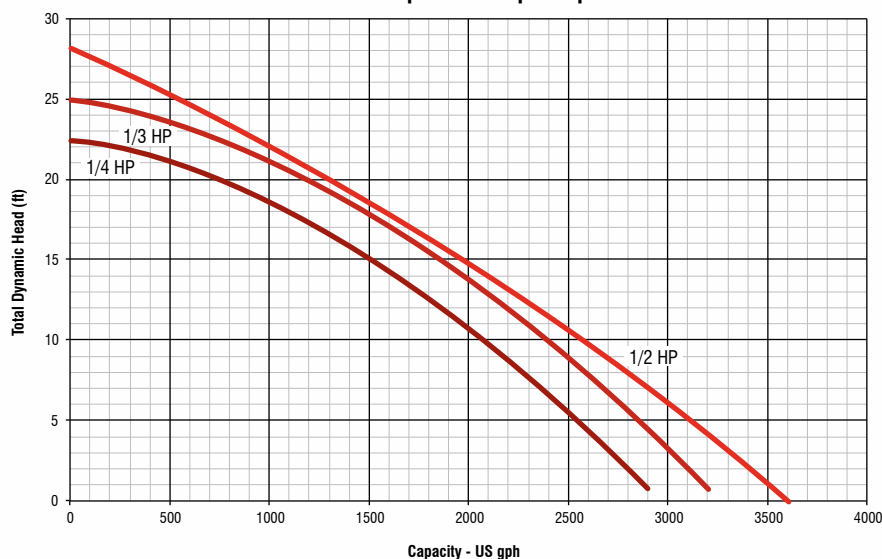


Model	Item Number	UPC	HP	Volts	Switch	Amps	Cord Length	Gallons Per Hour at Height					Shut-Off	On/Off Levels	Min Basin Diameter
								0'	5'	10'	15'	20'			
RL-SP25T	14942739	0 10121 14162 9	1/4	115	Tethered	2	8'	2900	2640	2100	1560	540	23'	On: 14.5" Off: 5.5"	14" or more
RL-SP33T	14942740	0 10121 14163 6	1/3	115	Tethered	4.4	8'	3200	2880	2520	1680	1260	25'	On: 14.5" Off: 5.5"	14" or more
RL-SP33V	14942741	0 10121 14164 3	1/3	115	Vertical	4.4	8'	3200	2880	2520	1680	1260	25'	On: 7.25" Off: 2.75"	11" or more
RL-SP50T	14942742	0 10121 14165 0	1/2	115	Tethered	5.3	8'	3600	3060	2520	1920	1320	28'	On: 14.5" Off: 5.5"	14" or more
RL-SP50V	14942743	0 10121 14166 7	1/2	115	Vertical	5.3	8'	3600	3060	2520	1920	1320	28'	On: 7.25" Off: 2.75"	11" or more

## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL-SP25T	7.5"	9.25"	11.75"	9.5	0.47	104	26	4
RL-SP33T	7.5"	9.25"	11.75"	11.5	0.47	104	26	4
RL-SP33V	9.05"	9.25"	13.5"	11	0.65	60	20	3
RL-SP50T	7.75"	9.25"	11.75"	14	0.49	104	26	4
RL-SP50V	9.05"	9.25"	13.5"	13	0.65	60	20	3

Thermoplastic Sump Pumps



## CAST IRON SUMP PUMPS

### APPLICATIONS

Ideal for average-to high-volume water and effluent removal in residential spaces such as basements, laundry facilities, and crawl spaces.

### FEATURES & BENEFITS

- Automatic submersible sump pumps
- 1-1/2" FNPT discharge
- Piggyback float switch
- Clog-resistant design (1/2" solids handling)
- PSC motor
- 10' cord

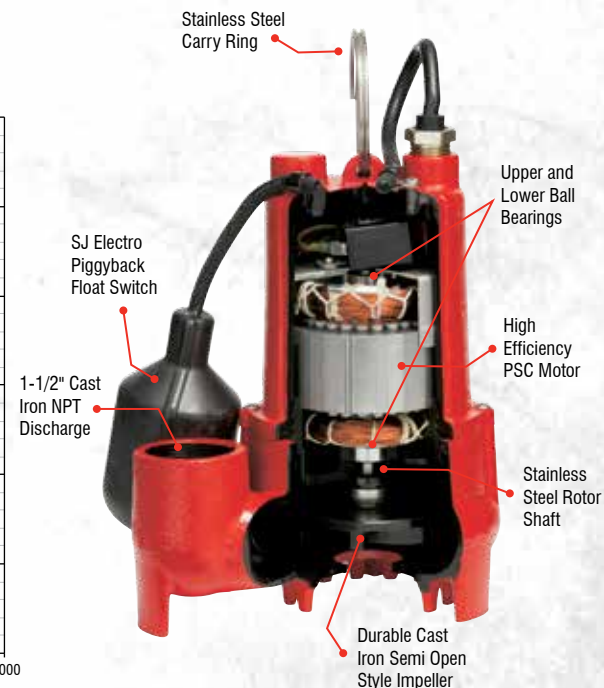
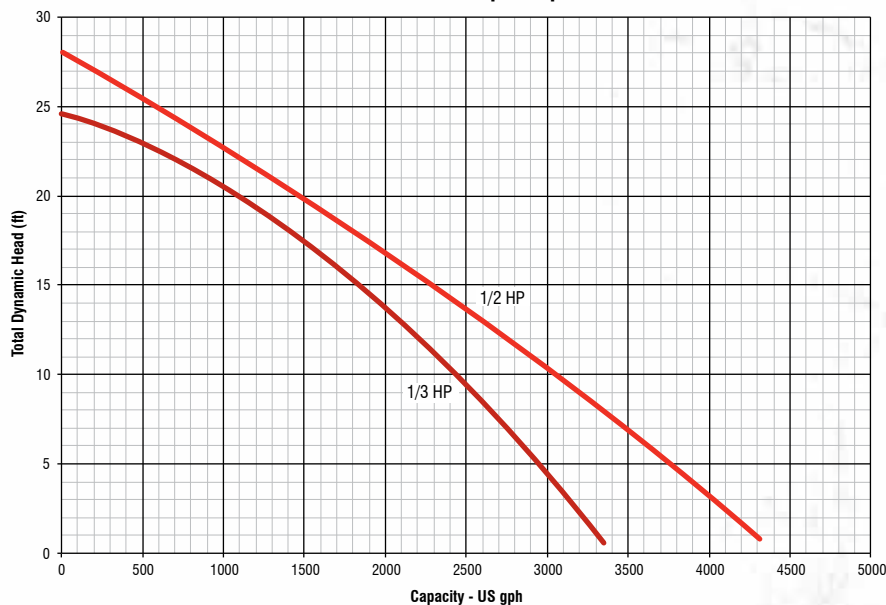


Model	Item Number	UPC	HP	Switch	Volts	Amps	Cord Length	Gallons Per Hour at Height					Shut-Off	On/Off Levels	Min Basin Diameter
								0'	5'	10'	15'	20'			
RL-SC33T	14942744	0 10121 14167 4	1/3	Tethered	115	4.4	10'	3350	3000	2460	1860	960	25'	On: 13" Off: 5"	15" or more
RL-SC33V	14942745	0 10121 14168 1	1/3	Vertical	115	4.4	10'	3350	3000	2460	1860	960	25'	On: 7.25" Off: 2.75"	11" or more
RL-SC50T	14942746	0 10121 14169 8	1/2	Tethered	115	5.3	10'	4300	3840	3000	2220	1440	28'	On: 13" Off: 5"	15" or more
RL-SC50V	14942747	0 10121 14170 4	1/2	Vertical	115	5.3	10'	4300	3840	3000	2220	1440	28'	On: 7.25" Off: 2.75"	11" or more

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL-SC33T	7.25"	8.75"	13"	20	0.48	81	27	3
RL-SC33V	6.75"	8.75"	13"	21	0.44	81	27	3
RL-SC50T	7.25"	8.75"	13"	20	0.48	75	25	3
RL-SC50V	6.75"	8.75"	13"	21	0.44	75	25	3

Cast Iron Sump Pumps



# 1/3 HP DUAL CAST IRON SUMP PUMP SYSTEM

## APPLICATIONS

Ideal for average-to high-volume water removal in residential spaces such as basements, laundry facilities, and crawl spaces.

This system offers worry-free operation; providing you with a back-up pump, and double the flow rate when needed.\*

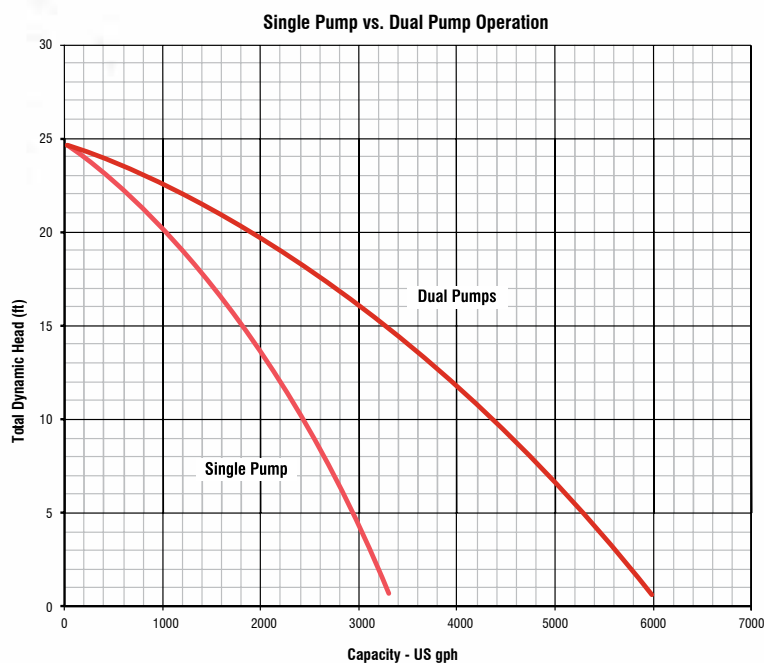
## FEATURES & BENEFITS

- Dual automatic submersible sump pumps
- Pre-assembled piping and check valves included
- Maximum head of 25' feet
- 10' power cord
- 1-1/2" FNPT discharges
- Piggyback float switches
- Clog-resistant design (1/2" solids handling)
- PSC motors



Model	Item Number	UPC	HP	Volts	Switch	Discharge	Cord Length	Operation	Gallons Per Hour at Height					Shut-Off	On/Off Levels	Min Basin Diameter
									0'	5'	10'	15'	20'			
RL-SC33DUP	14942771	0 10121 14606 8	1/3	115	Vertical	1-1/2" FNPT	10'	Single Pump Dual Pump	3350 6000	3000 5400	2460 4425	1860 3345	960 1725	25'	On: 7.25" Off: 2.75"	15"

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL-SC33DUP	9.5"	17.25"	14"	45	1.33	24	8	3



\*Friction loss in pipe not included





## PRE-ASSEMBLED DUPLEX PIPING AND CHECK VALVE KIT

### WANT PEACE OF MIND?

Our RL-DUPKIT allows you to quickly convert an existing single sump pump to a **DUAL SUMP SYSTEM**.

**Be prepared for unexpected flooding!** Adding a second pump gives you a back-up pump and increases your pump performance when you need it most.

Want to upgrade your pump? Don't throw your older pump away, use it as your **back-up pump** with the RL-DUPKIT.

Designed to work with 1-1/2" discharge sump pumps such as our RL-SC Cast Iron Series, our RL-SS Stainless Steel Series and our RL-SP Thermoplastic Series of sump pumps.

Vertical switches are needed in order to fit two units into one 15" diameter sump pit. Our Red Lion helpline can help you get the switch you need. Call 888.956.0000 for further assistance.



RL-DUPKIT

Item # 14942770

UPC Code: 0 10121 14605 1

#### Contents:

- Pipe assembly fits 1-1/2" discharge
- 2 - 1-1/2" MNPT check valves
- 1 rubber float stop
- Complete step-by-step instructions

### SINGLE RL-SC33V VS DUAL RL-SC33V

Operation Mode	Gallons Per Hour at Height				
	0'	5'	10'	15'	20'
Single Pump	3350	3000	2460	1860	960
Dual Pump	6000	5400	4425	3345	1725

\*Friction loss in pipe not included

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL-DUPKIT	2.5"	8.75"	13.25"	1.55	0.17	228	12	19



Shown set-up with two RL-SC33V (not included)



# PREMIUM SUBMERSIBLE STAINLESS STEEL SUMP PUMPS

## APPLICATIONS

Ideal for high-volume water removal in residential spaces such as basements and crawl spaces.

## FEATURES & BENEFITS

- **Automatic submersible sump pump**  
Ideal for high-volume water removable applications
- **Heavy-duty stainless steel and cast iron construction**  
For years of service and reliability
- **Clog-resistant design**  
Capable of passing 3/4" diameter solids
- **Piggyback float switch**  
Reliable automatic operation

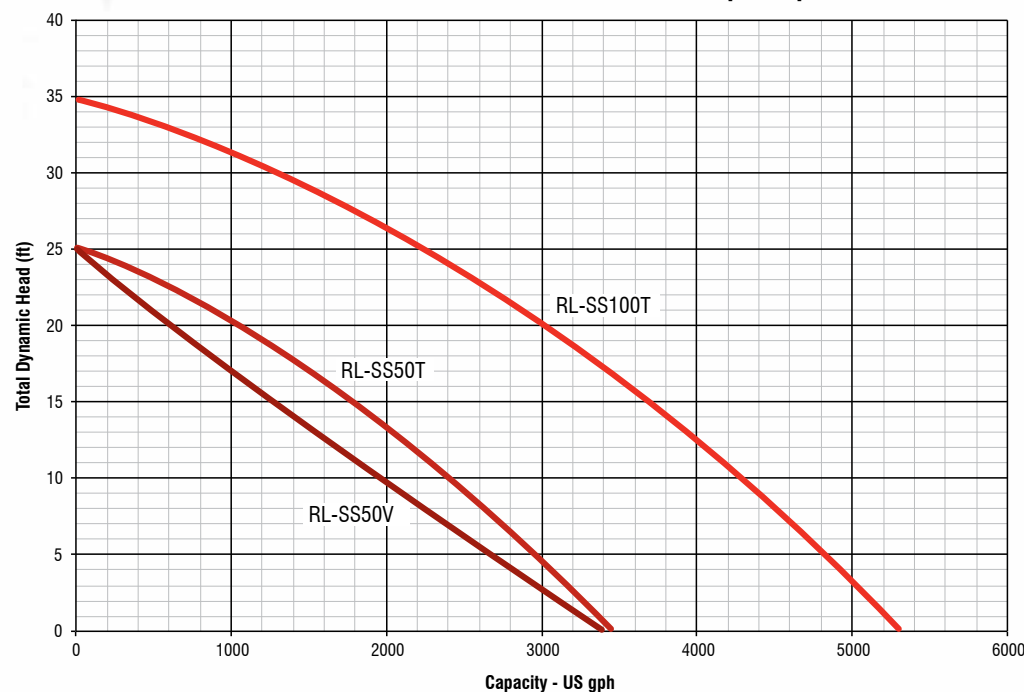


Model	Item Number	UPC	HP	Volts	Switch	Discharge	Amps	Cord Length	Gallons Per Hour at Height						Shut-Off	On/Off Levels	Min Basin Diameter
									0'	5'	10'	15'	20'	30'			
RL-SS50V	14942780	0 10121 14436 1	1/2	115	Vertical	1-1/2" FNPT	5	10'	3450	3000	2400	1800	-	-	25'	On: 7.5" Off: 4.5"	11" or more
RL-SS50T	14942781	0 10121 14437 8	1/2	115	Tethered	1-1/2" FNPT	5	10'	3450	3000	2400	1800	-	-	25'	On: 13.8"–14.8" Off: 5.5"–6.5"	15" or more
RL-SS100T	14942782	0 10121 14438 5	1	115	Tethered	1-1/2" FNPT	8	20'	5300	4800	4300	3700	3000	1300	35'	On: 14"–16" Off: 6"–8"	15" or more

## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL-SS50V	7.12"	10"	17"	22.5	0.70	40	20	2
RL-SS50T	7"	10.5"	17"	22.5	0.72	40	20	2
RL-SS100T	10"	11"	18"	33.6	1.15	32	16	2

Premium Submersible Stainless Steel Sump Pumps



## PEDESTAL PUMPS

### APPLICATIONS

Ideal for average-to high-volume water removal in residential spaces such as basements and crawl spaces.

### FEATURES & BENEFITS

- Automatic pedestal sump pumps (column style)
- Poly or cast iron models available
- Adjustable snap action float switch
- Clog-resistant design



SC33PED



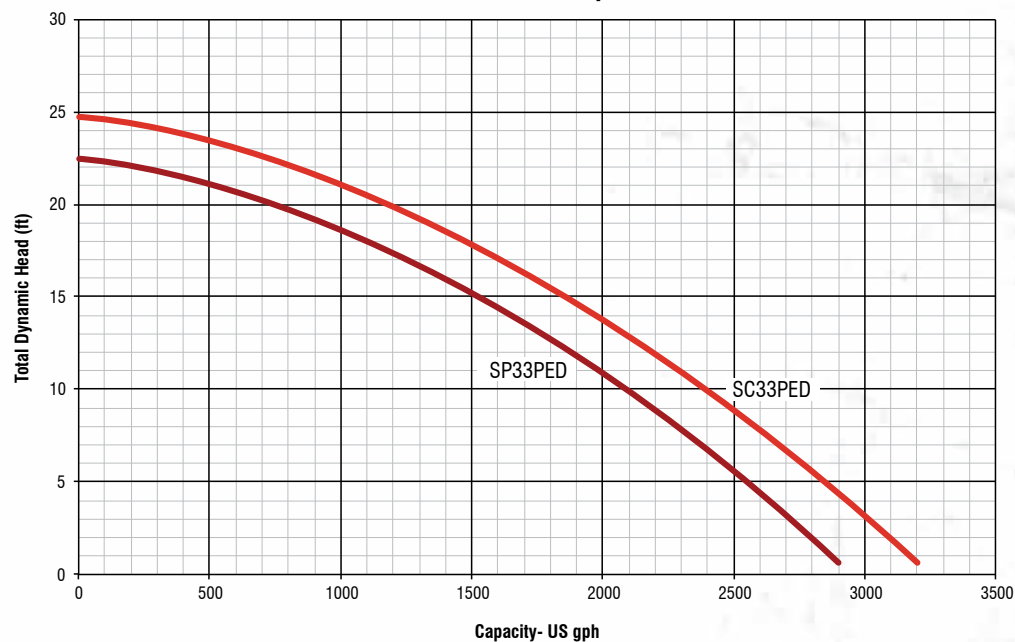
SP33PED

Model	Item Number	UPC	HP	Volts	Discharge	Amps	Cord Length	Gallons Per Hour at Height				Shut-Off	Min Basin Diameter
								0'	5'	10'	15'		
SP33PED	14942050	0 10121 11814 0	1/3	115	1-1/4" FNPT	4	8'	3300	2800	2040	620	17'	11" or more
SC33PED	14942051	0 10121 11815 7	1/3	115	1-1/4" FNPT	4	8'	3500	3310	2550	600	17'	11" or more

### Carton Specifications

Model	Retail Carton			Protective Outer Carton			Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
	Length	Width	Height	Length	Width	Height					
SP33PED	8.25"	9"	33"	8.75"	10"	34"	14	1.42	20	20	1
SC33PED	8.25"	9"	33"	8.75"	10"	34"	20	1.42	20	20	1

### Pedestal Pumps





## UNDER SINK SUMP PACKAGE

### APPLICATIONS

Ideal for water removal from impractical gravity drainage areas and residential spaces such as under sinks and laundry trays.

### FEATURES & BENEFITS

- 1/3 hp sump pump
- Engineered thermoplastic construction
- 6 gallon polypropylene basin
- Pre-assembled water removal system
- Up to 3200 gph

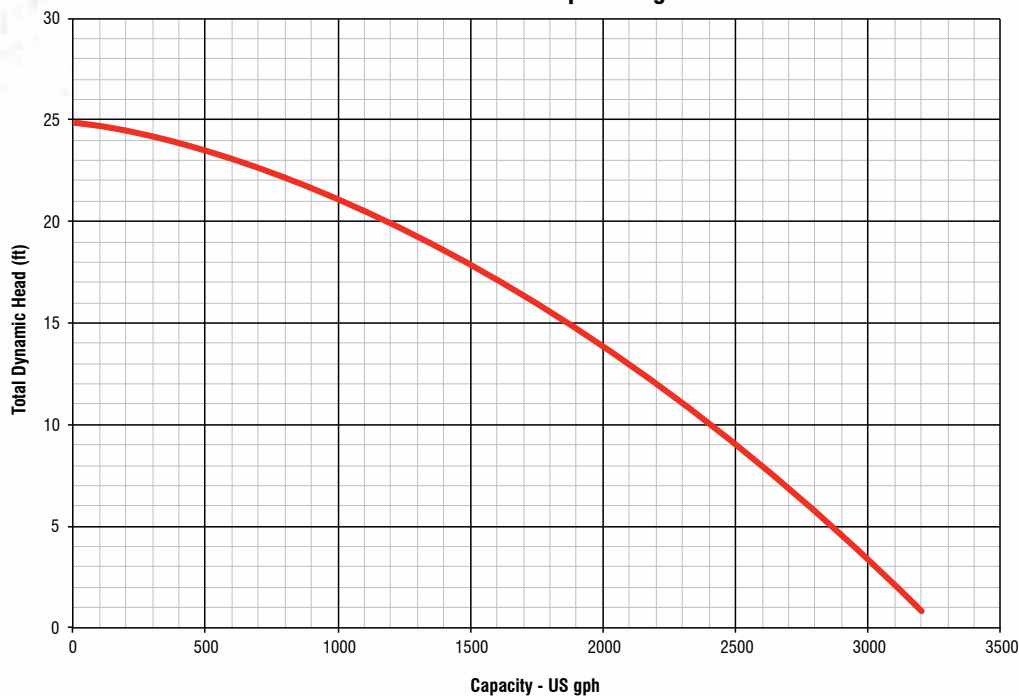


Model	Item Number	UPC	HP	Switch	Volts	Discharge	Vent	Amps	Cord Length	Gallons Per Hour at Height					Shut-Off	Basin Size
										0'	5'	10'	15'	20'		
RL-SPS33	14942736	0 10121 14159 9	1/3	Vertical	115	1-1/2" FNPT	1-1/2" FNPT	4.4	8'	3200	2880	2520	1680	1260	25'	6 Gallon

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL-SPS33	15"	15"	13.5"	18.5	1.76	18	6	3

Under Sink Sump Package



## BACK-UP SUMP SYSTEM

### APPLICATIONS

Provides emergency protection from water damage due to primary sump pump failure or power outages in residential areas such as basements and crawl spaces.

### FEATURES & BENEFITS

- Automatic sump pump back-up system
- 12 Volt DC/980 mA battery charger with alarm
- System includes charger, pump, 1-1/2" street elbow, 1-1/2" check valve, 1-1/2" coupling, battery box, vertical float switch

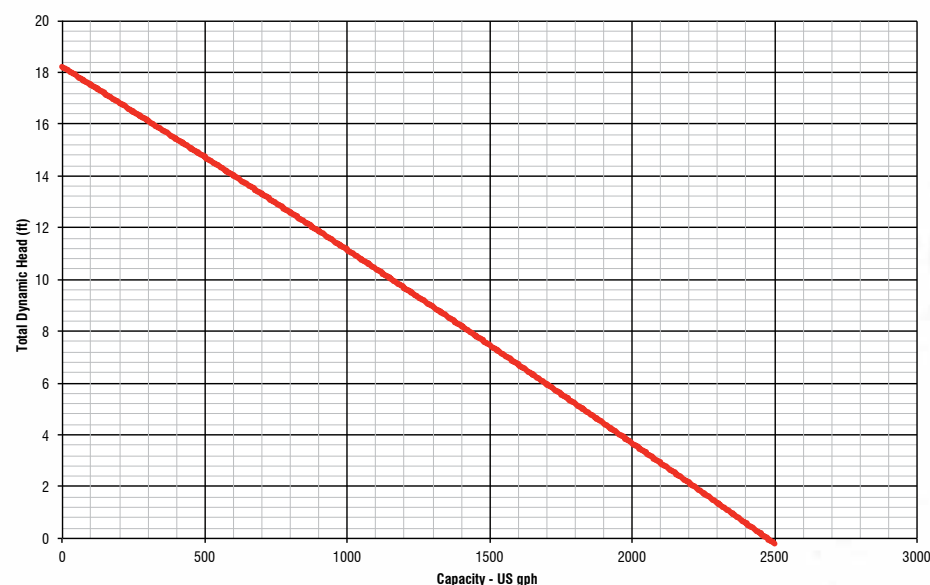


Model	Item Number	UPC	Switch	Volts	Discharge	Amps	Cord Length	Gallons Per Hour at Height				Shut-Off	Basin Diameter
								0'	5'	10'	15'		
RL-SPBS	14942790	0 10121 14655 6	Vertical	Pump: 12 V DC Charger: 120 V	1-1/2"	14	Charger: 6'	2500	1750	1200	500	18'	11" or more

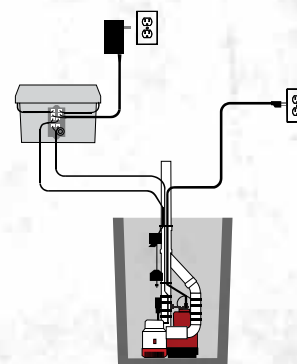
### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL-SPBS	15.25"	15.25"	13.5"	17	1.79	18	6	3

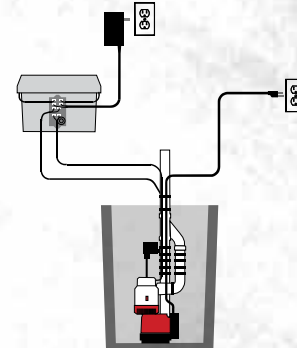
RL-SPBS



Regular Installation



Alternate Installation







## EFFLUENT/SEWAGE PRODUCTS



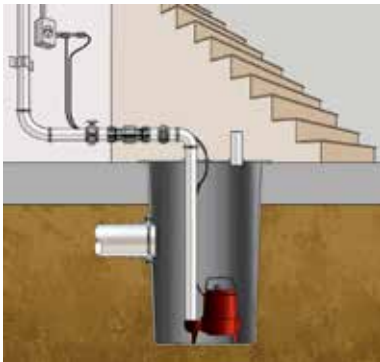
## Why do you need a sewage pump?

A necessity for homes with basement toilets or those without gravity sewage drains provided by the community, a sewage pump lifts flushable waste up to 2" diameter from the sewage basin into the main sewer line. Red Lion submersible sewage pumps handle the tough and demanding tasks of sewage waste transfer with efficiency and dependability. Installation takes as little as 30 minutes using common household tools.

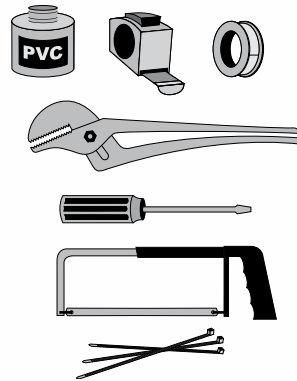
## New installation

Just as in selecting a replacement pump, new installation requires you to determine the size of pump you need and the type of discharge pipe you have. Figure the size by counting the number of drains that discharge into the sewage basin and by considering the distance the waste must be lifted.

## Typical installations



### Tools needed



## Replacing an existing sewage pump

### 1. Determine the size of your current pump.

Check the identification plate to determine the horsepower (hp) needed. Generally, you will want to select a pump with the same horsepower as your current pump.

### 2. Determine the size and type of discharge pipe you have.

Sewer lines are 2" in diameter or larger, so it is important to measure the line. Additionally, verify whether your line is made of PVC, ABS, galvanized steel, or copper.

## CAST IRON SURFACE EFFLUENT PUMPS

### APPLICATIONS

Ideal for pumping liquid from septic tanks, as well as pumping out flooded basements, irrigation, and general dewatering.

### FEATURES & BENEFITS

- Self-priming effluent pump with built-in check valve
- Rugged cast iron casing
- Heavy-duty motor, 115/230 Volts
- Cast iron impeller

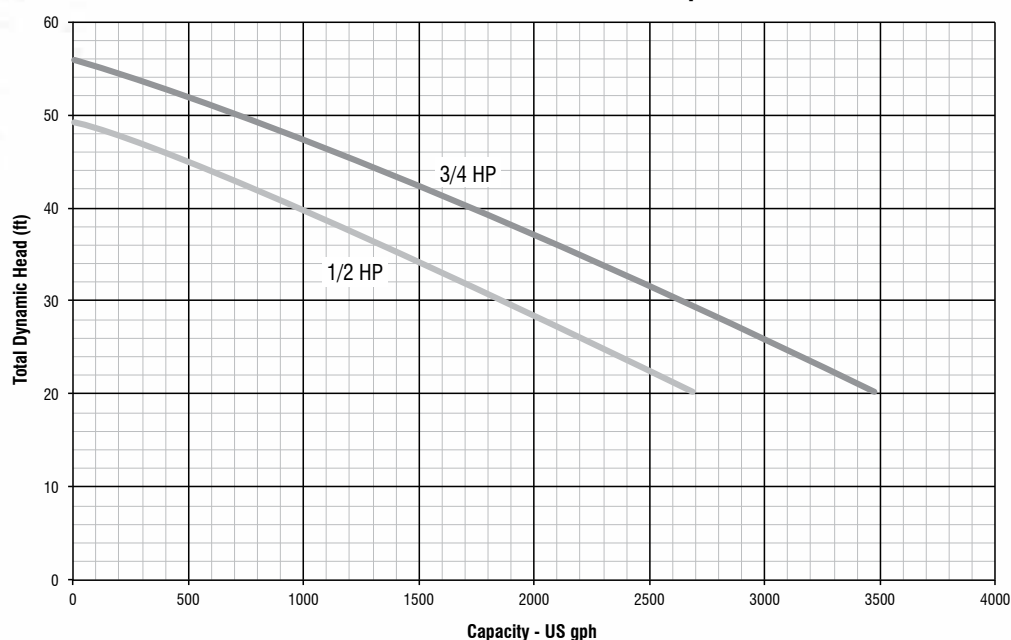


Model	Item Number	UPC	HP	Volts	Discharge	Cord Length	Gallons Per Hour at Height				Shut-Off	Max Pressure PSI
							20'	30'	40'	50'		
RL-S50	621810	0 10121 12643 5	1/2	115/230	1-1/4" FNPT	8'	2700	1860	960	-	49'	21
RL-S75	621826	0 10121 12647 3	3/4	115/230	1-1/4" FNPT	8'	3480	2640	1740	600	56'	24

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL-S50	10.25"	20"	11.75"	42	1.39	32	8	4
RL-S75	10.25"	20"	11.75"	44	1.39	32	8	4

**Cast Iron Surface Effluent Pumps**



## CAST IRON SUMP/EFFLUENT PUMPS

### APPLICATIONS

Ideal for average-to high-volume water and effluent removal in residential spaces such as basements, laundry facilities, and crawl spaces.

### FEATURES & BENEFITS

- Automatic submersible sump/effluent pumps
- 1-1/2" FNPT discharge
- Piggyback float switch
- Clog-resistant design (1/2" solids handling)
- PSC motor
- 10' cord

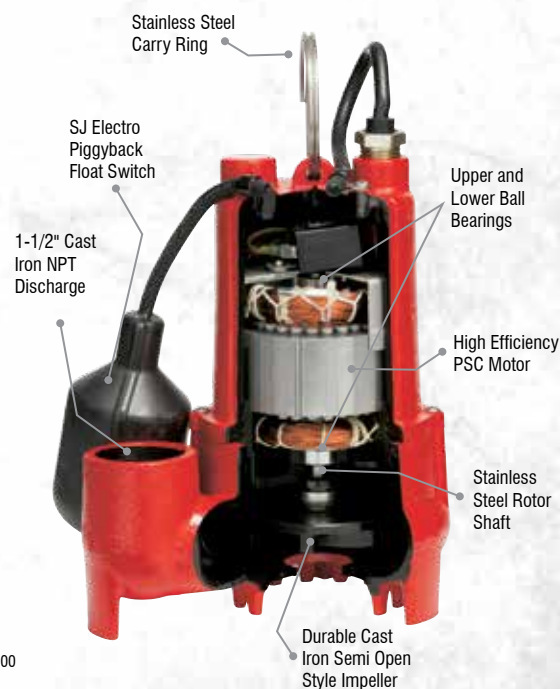
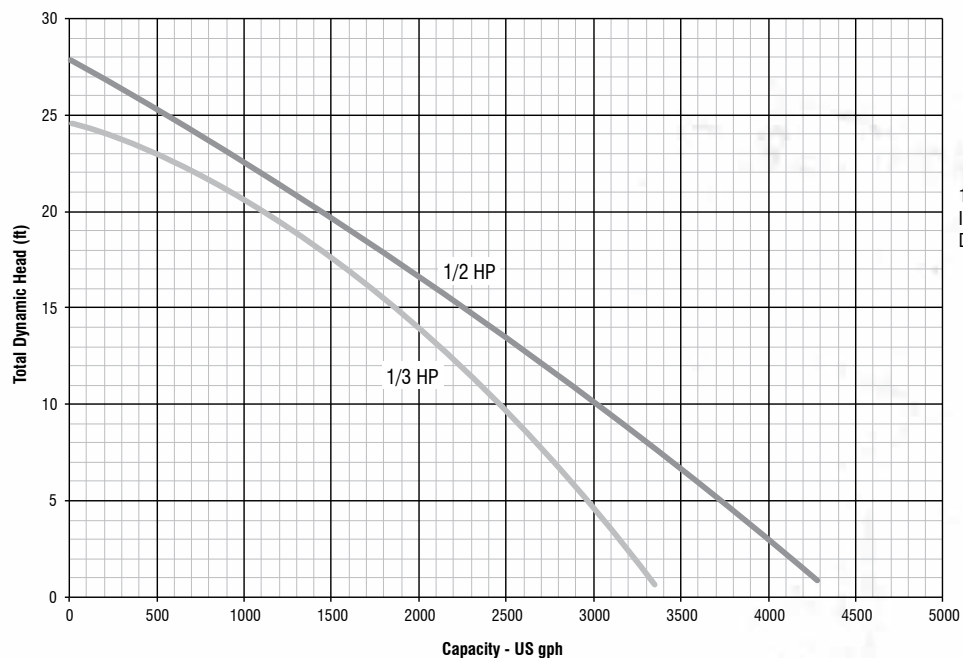


Model	Item Number	UPC	HP	Switch	Volts	Amps	Discharge	Cord Length	Gallons Per Hour at Height					Shut-Off	Basin Diameter
									0'	5'	10'	15'	20'		
RL-SC33T	14942744	0 10121 14167 4	1/3	Tethered	115	4.4 A	1-1/2" FNPT	10'	3350	3000	2460	1860	960	25'	15" or more
RL-SC50T	14942746	0 10121 14169 8	1/2	Tethered	115	5.3 A	1-1/2" FNPT	10'	4300	3840	3000	2220	1440	28'	15" or more

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL-SC33T	7.25"	8.75"	13"	20	0.48	81	27	3
RL-SC50T	7.25"	8.75"	13"	20	0.48	75	25	3

Cast Iron Sump/Effluent Pumps





## PREMIUM SUBMERSIBLE STAINLESS STEEL SUMP/EFFLUENT PUMPS

### APPLICATIONS

Ideal for high volume water and effluent removal in residential spaces such as basements, laundry facilities, and crawl spaces.

### FEATURES & BENEFITS

- **Automatic submersible sump pump**  
Ideal for high-volume water removable applications
- **Heavy-duty stainless steel and cast iron construction**  
For years of service and reliability
- **Clog-resistant design**  
Capable of passing 3/4" diameter solids
- **Tethered float switch**  
Reliable automatic operation for use in basins 15" diameter or greater

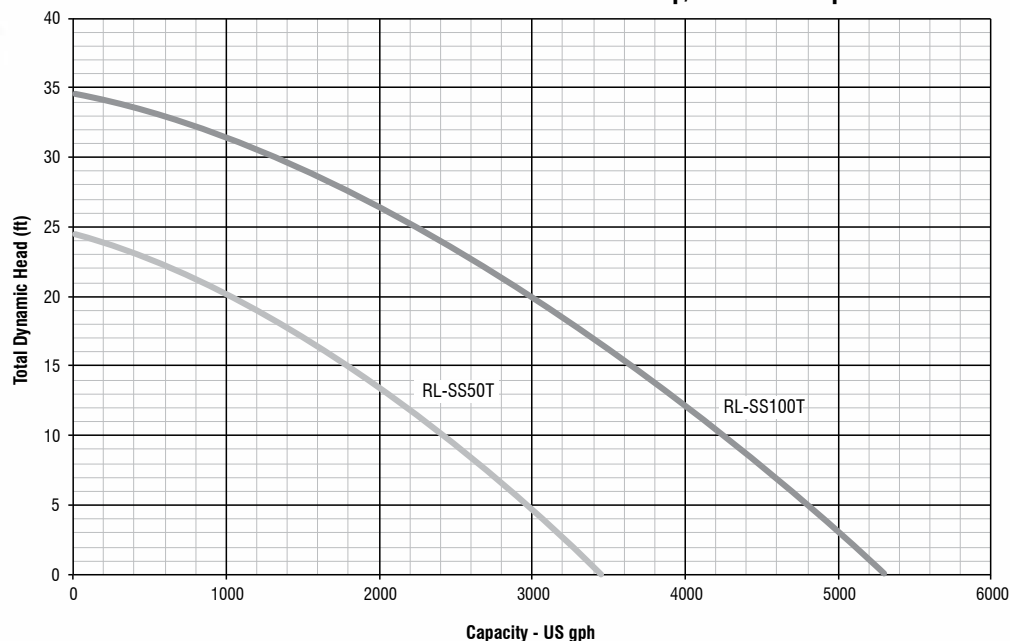


Model	Item Number	UPC	HP	Volts	Discharge	Cord Length	Gallons Per Hour at Height						Shut-Off	Min Basin Diameter	On/Off Levels
							0'	5'	10'	15'	20'	30'			
RL-SS50T	14942781	0 10121 14437 8	1/2	115	1-1/2" FNPT	10'	3450	3000	2400	1800	-	-	25'	15" or more	On: 13.8"– 14.8" Off: 5.5"– 6.5"
RL-SS100T	14942782	0 10121 14438 5	1	115	2" FNPT 1-1/2" FNPT adapter included	20'	5300	4800	4300	3700	3000	1300	35'	15" or more	On: 14"–16" Off: 6"– 8"

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL-SS50T	7"	10.5"	17"	22.5	0.72	40	20	2
RL-SS100T	10"	11"	18"	33.6	1.15	32	16	2

Premium Submersible Stainless Steel Sump/Effluent Pumps



# HEAVY-DUTY CAST IRON EFFLUENT PUMP

## APPLICATIONS

Ideal for liquid effluent pumping applications, as well as light commercial applications with up to 11/16" diameter solids.

## FEATURES & BENEFITS

- 1/3 hp 115 Volt thermal overload protected continuous duty motor
- Rugged cast iron construction
- Heavy-duty cast iron pump base and impeller
- Automatic piggyback float switch

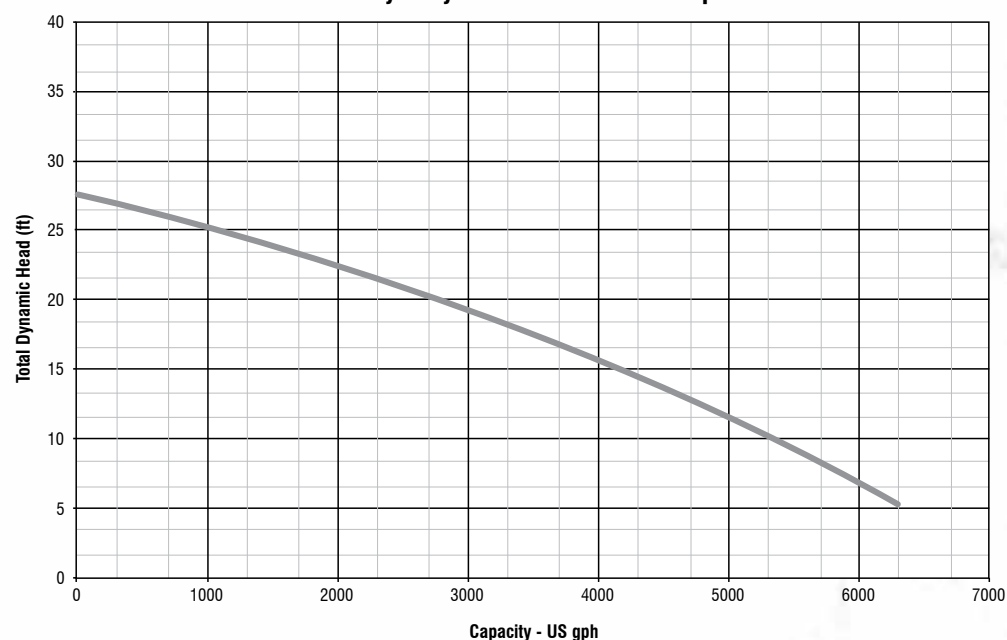


Model	Item Number	UPC	HP	Amps	Volts	Discharge	Cord Length	Gallons Per Hour at Height					Shut-Off	Min Basin Diameter
								5'	10'	15'	20'	25'		
RL31EA	620040	0 10121 12134 8	1/3	10.4	115	2" NPT	20'	6300	5400	4200	2700	900	28'	15" or more

## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL31EA	9.75"	12.5"	21.5"	52	1.52	24	12	2

Heavy-Duty Cast Iron Effluent Pump



# CAST IRON SEWAGE PUMP

## APPLICATIONS

Ideal for high volume sewage, effluent, and general wastewater applications in places like parking lots, leaching fields, and laundry facilities.

## FEATURES & BENEFITS

- Automatic submersible cast iron sewage pump
- PSC dual bearing motor with overload protection
- Capable of passing up to 2" diameter solids
- Piggyback tethered float switch
- 10' power cord

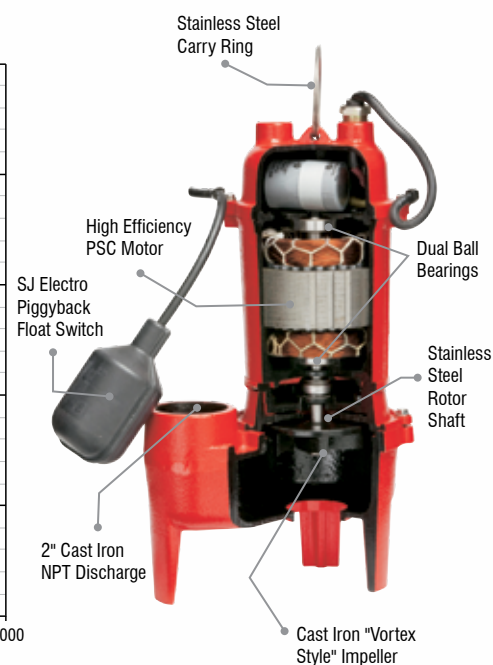
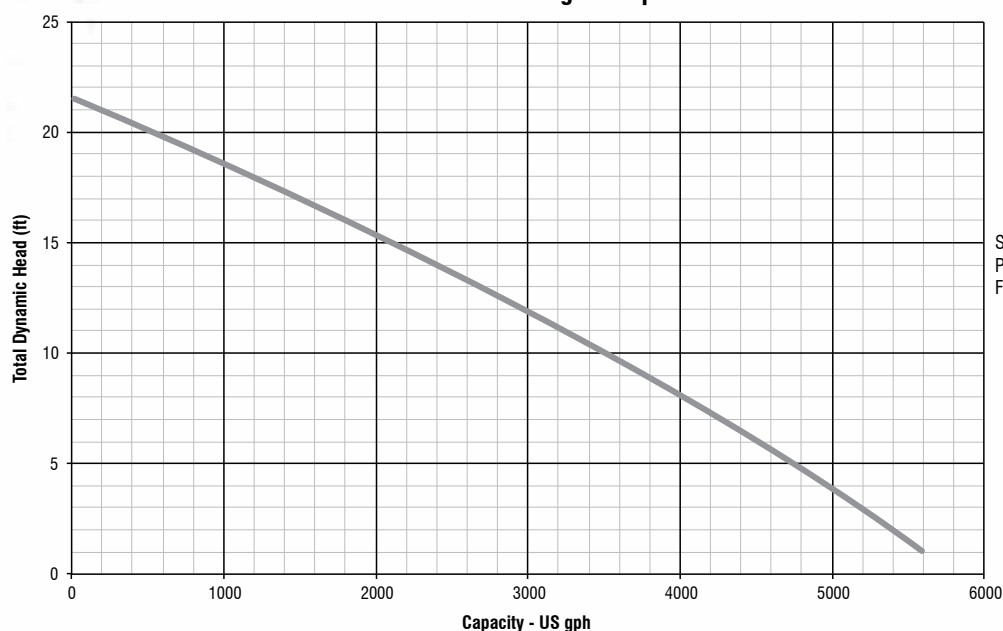


Model	Item Number	UPC	HP	Volts	Amps	Discharge	Cord Length	Gallons Per Hour at Height					Shut-Off	On/Off Levels	Min Basin Diameter
								0'	5'	10'	15'	20'			
RL-WC50TA	14942748	0 10121 14171 1	1/2	115	9	2" FNPT	10'	5600	4920	3720	1680	480	22'	On: 17.5" Off: 7.5"	15" or more

## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL-WC50TA	8.5"	8.9"	18.4"	40	0.81	40	20	2

Cast Iron Sewage Pump





## PREMIUM CAST IRON SEWAGE PUMP

### APPLICATIONS

Ideal for high volume sewage, effluent, and general wastewater applications in places like parking lots, leaching fields, and laundry facilities.

### FEATURES & BENEFITS

- Automatic submersible cast iron sewage pump
- PSC dual bearing motor with overload protection
- Capable of passing up to 2" diameter solids
- Piggyback tethered float switch
- 20' power cord

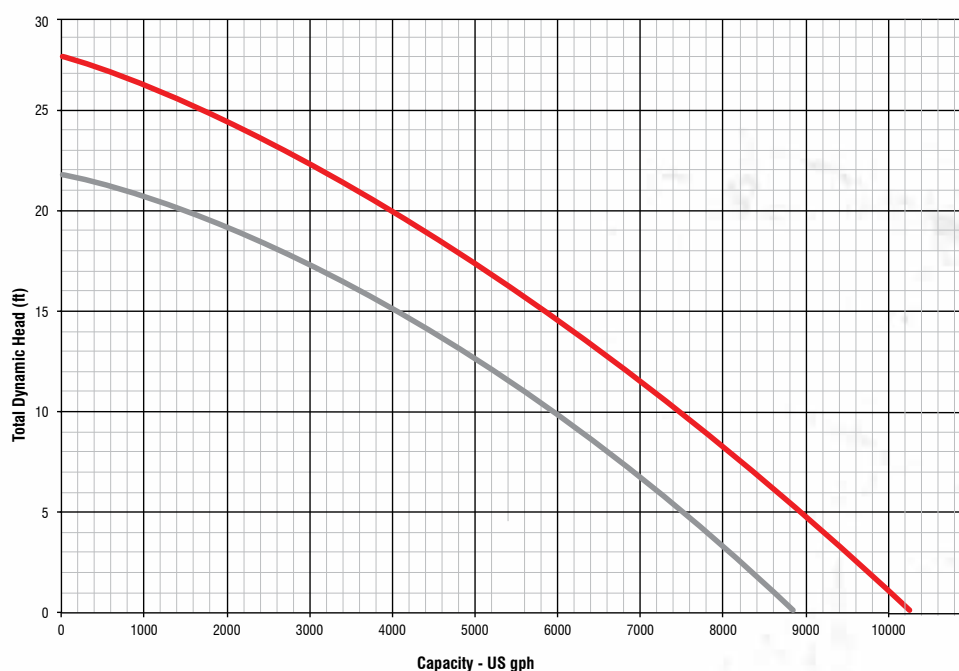


Model	Item Number	UPC	HP	Volts	Amps	Discharge	Cord Length	Gallons Per Hour at Height						Shut-Off	On/Off Levels	Min Basin Diameter
								0'	5'	10'	15'	20'	25'			
RL52WAM	620051	0 10121 13855 1	1/2	115	11.4	2" FNPT	20'	9000	7200	6000	4500	960	-	22'	On: 16"-18" Off: 9"-11"	15" or more
RL75WAM	14942635	0 10121 14583 2	3/4	115	10.3	2" FNPT	10'	10500	9300	7620	5880	4200	1740	28'	On: 17.5" Off: 10.5"	15" or more

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL52WAM	11"	13.5"	16"	50	1.38	27	9	3
RL75WAM	11.75"	13.75"	15.5"	57	1.45	27	9	3

Premium Cast Iron Sewage Pump



# HEAVY-DUTY CAST IRON SEWAGE PUMP

## APPLICATIONS

Ideal for raw sewage applications, as well as light commercial applications with up to 2" diameter solids.

## FEATURES & BENEFITS

- 1/2 hp 115 Volt thermal overload protected motor
- Rugged cast iron construction
- Heavy-duty cast iron pump base and impeller
- Automatic piggyback float switch

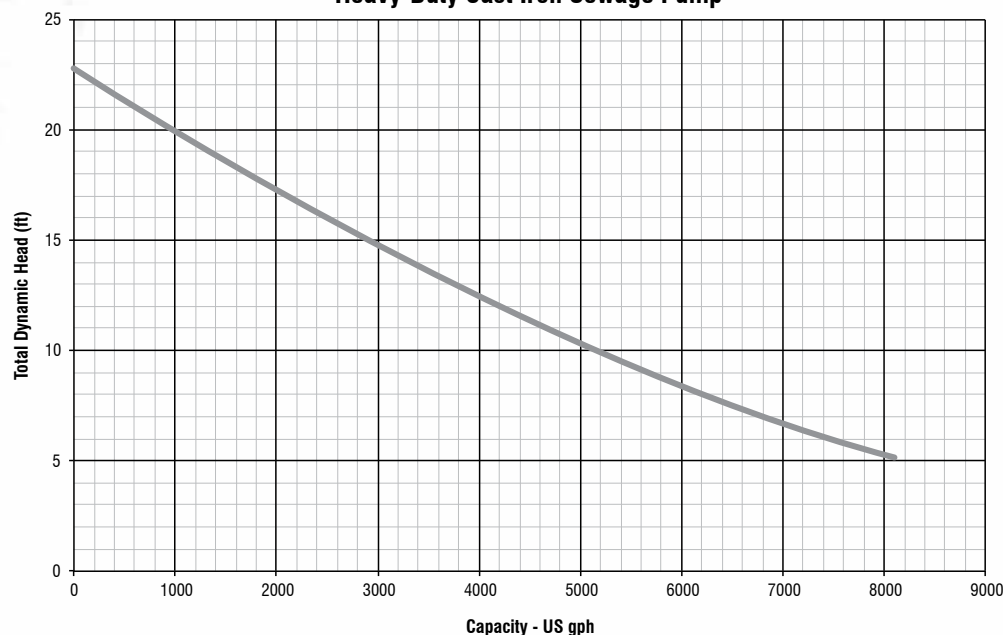


Model	Item Number	UPC	HP	Amps	Volts	Discharge	Cord Length	Gallons Per Hour at Height				Shut-Off	Min Basin Diameter
								5'	10'	15'	20'		
RL52SA	620043	0 10121 12135 5	1/2	11.6	115	2" NPT	20'	8100	5400	2820	840	23'	15" or more

## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL52SA	9.75"	12.5"	21.5"	58	1.52	24	12	2

Heavy-Duty Cast Iron Sewage Pump



# SEWAGE BASIN SYSTEMS

## APPLICATIONS

Ideal for the collection and removal of sewage, effluent, drainage or seepage water from low lying areas.

## FEATURES & BENEFITS

- 18" x 30" polyethylene basin
- 2" full-flow sewage check valve
- Cover assembly and hardware
- Includes 1/2 hp sewage pump
- Discharge pipe - pump to basin cover
- Heavy-duty cast iron pump base and impeller
- Automatic piggyback float switch



RL-WCS50TA

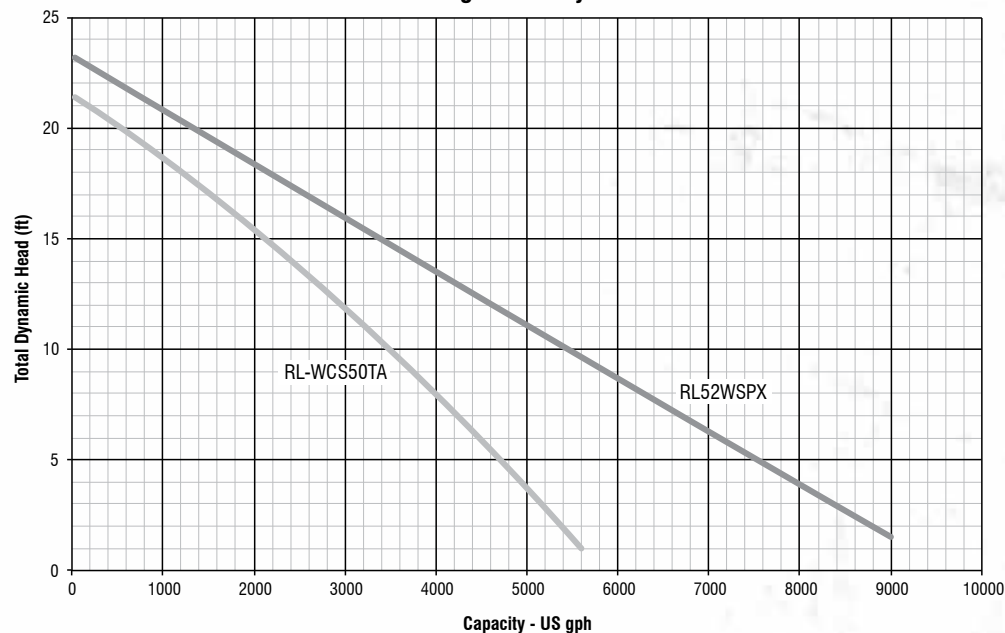
RL52WSPX

Model	Item Number	UPC	HP	Amps	Volts	Discharge	Cord Length	Gallons Per Hour at Height					Shut-Off	On/Off Levels	Assembly Required
								0'	5'	10'	15'	20'			
RL-WCS50TA	14942749	0 10121 14172 8	1/2	9	115	2" FNPT	10'	5600	4920	3720	1680	480	22'	On: 17.5" Off: 7.5"	Assembly Required
RL52WSPX	620061	0 10121 13856 8	1/2	11.4	115	2" NPT	20'	9000	7200	6000	4500	960	22'	On: 16"-18" Off: 9"-11"	Fully Assembled

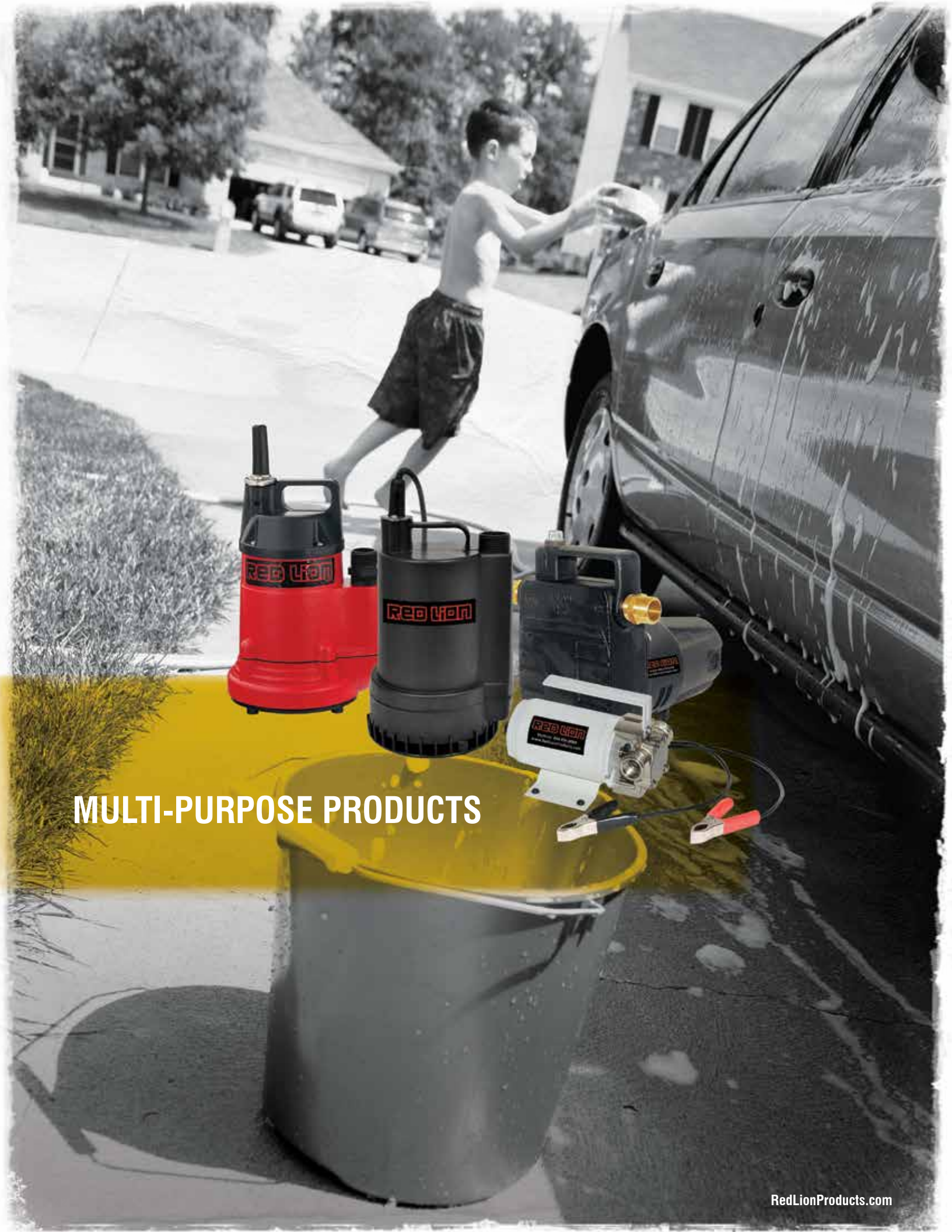
## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL-WCS50TA	18"	18"	36"	55	6.75	4	2	2
RL52WSPX	18"	18"	36"	61	6.75	4	2	2

## Sewage Basin Systems







**MULTI-PURPOSE PRODUCTS**

## General specifications

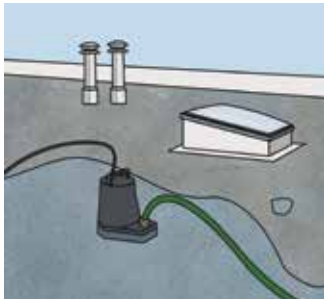
Whether selecting a submersible or non-submersible, emergency or permanent use multi-purpose pump, rest assured that your Red Lion pump is crafted to perform and last.

## Typical installations

Red Lion offers multi-purpose pumps for a complete range of household applications. Whatever you need, Red Lion has the pump for you. Our multi-purpose pumps are ideal for:

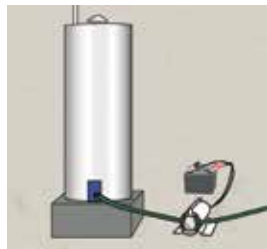
Removing or transferring water from basements, rooftops, hot tubs, crawl spaces, and general dewatering

**Models: MP16, MP25, MP25A, RL50CON**



Draining waterbeds, hot water tanks, appliances, aquariums, and other emergency dewatering needs

**Models: MPFVK115, MPFV12, MPDP, MPTC**



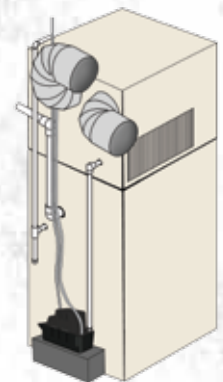
Boosting household water pressure for washing vehicles, sidewalks, and driveways, or for use in general water transfer applications

**Model: MPTC**



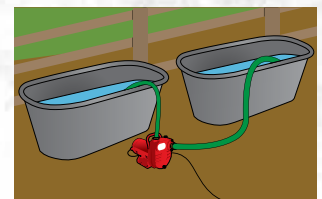
Removing condensation build-up from air handlers, boilers, furnaces, ice makers, and dehumidifiers

**Models: C15, C20ST**



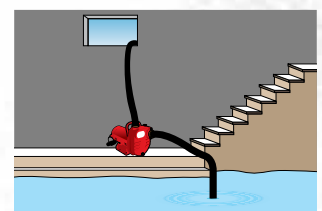
Dewatering and water feature applications

**Models: RL-160U, RL-250U, RL50CON**



Pumping out flooded basements, livestock watering, flood irrigation, and general dewatering

**Model: RL-50, RL50CON**



## THERMOPLASTIC UTILITY PUMPS

### APPLICATIONS

Ideal for general water transfer applications and household water removal in places like basements, aquariums, and waterbeds.

### FEATURES & BENEFITS

- Submersible 115 Volt utility pumps
- Reinforced engineered thermoplastic construction
- Screened bottom intake design
- Removes water to within 3/16" of surface
- Includes garden hose adapter



RL-MP25



RL-MP16



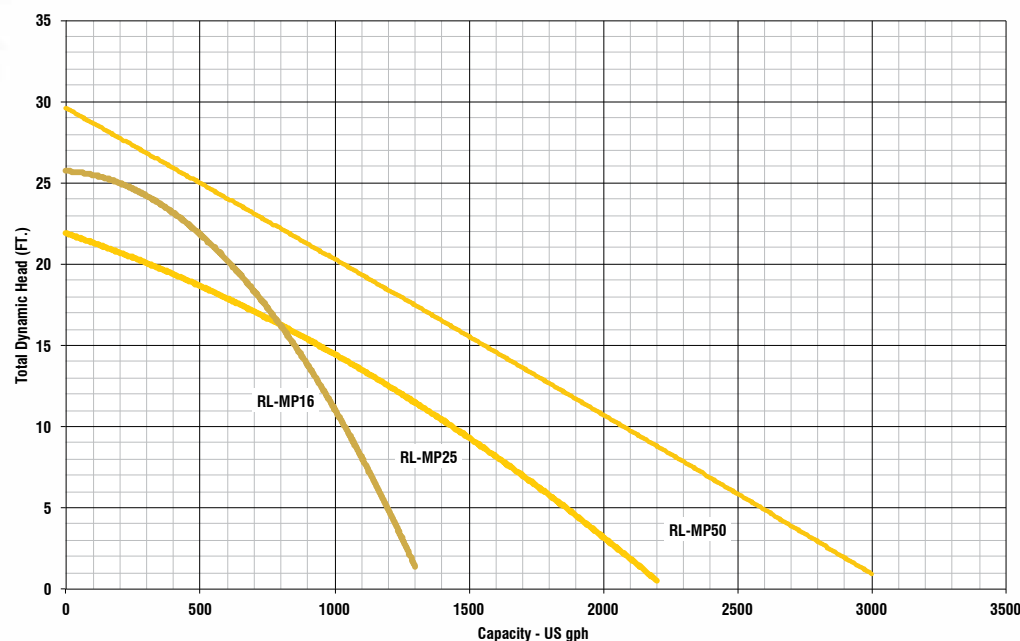
RL-MP50

Model	Item Number	UPC	HP	Amps	Volts	Discharge	Intake	Cord Length	Gallons Per Hour at Height					Shut-Off
									0'	5'	10'	15'	20'	
RL-MP16	14942731	0 10121 14154 4	1/6	2	115	1" MNPT 3/4" GHT	Screened Bottom	8'	1300	1223	1068	864	550	26'
RL-MP25	14942732	0 10121 14155 1	1/4	2.5	115	1-1/4" MNPT 3/4" GHT	Screened Bottom	8'	2200	1920	1440	900	-	22'
RL-MP50	14942721	0 10121 14584 9	1/2	4	115	1-1/2" FNPT 3/4" GHT	Screened Bottom	8'	3000	2671	2158	1543	930	30'

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL-MP16	6.3"	6.3"	11.75"	7.25	0.27	168	42	4
RL-MP25	6.3"	6.3"	12"	7.5	0.28	168	42	4
RL-MP50	8.5"	8.5"	15"	7.75"	0.63	60	20	3

### Thermoplastic Utility Pump





## ALUMINUM UTILITY PUMPS

### APPLICATIONS

Ideal for general water transfer applications and household water removal in places like basements, crawl spaces, rooftops, and waterbeds.

### FEATURES & BENEFITS

- Submersible 115 Volt utility pumps
- Corrosion-resistant aluminum casing for superior heat dissipation
- Lightweight portability
- Removes water to within 1/4" of surface
- 3/4" garden hose adapter included
- Oil-free motor design



RL-160U



RL-250U



Model	Item Number	UPC	HP	Amps	Volts	Discharge	Intake	Cord Length	Gallons Per Hour at Height					Shut-Off
									0'	5'	10'	15'	20'	
RL-160U	620109	0 10121 12595 7	1/6	2.1	115	1" FNPT 3/4" GHT	Screened Bottom	10'	1300	1200	840	420	-	19'
RL-250U	14942734	0 10121 14157 5	1/4	3.2	115	1" FNPT 3/4" GHT	Screened Bottom	10'	1500	1440	1140	720	180	21'

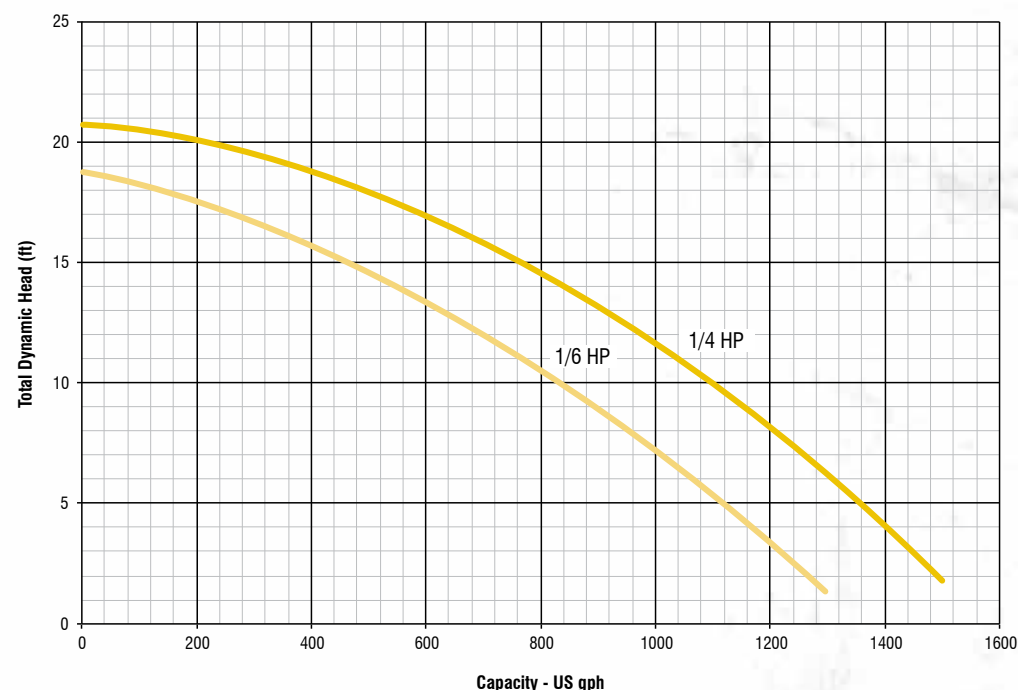
### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Master Pack Qty.
RL-160U	6"	6"	12"	9	0.25	6
RL-250U	6"	6"	12"	9.5	0.25	6

### Master Pack Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL-160U	18.75"	12.75"	13"	54	1.80	21 Master Packs	7 Master Packs	3
RL-250U	18.75"	12.75"	13"	57	1.80	21 Master Packs	7 Master Packs	3

### Aluminum Utility Pumps



## AUTOMATIC UTILITY PUMP

### APPLICATIONS

Ideal for general water transfer applications and household water removal in places like basements, crawl spaces, rooftops, and other areas where automatic operation is required. This pump activates in 3 minute intervals to detect if water is present. If water is present, pump will continue to operate until water is removed.

### FEATURES & BENEFITS

- Automatic submersible 115 Volt utility pump
- Reinforced engineered thermoplastic construction
- Technologically advanced switch for automatic operation
- Checks for water every 3 minutes
- Screened bottom intake design removes water within 3/4" of surface or 1/4" of surface without the screen
- Includes garden hose adapter

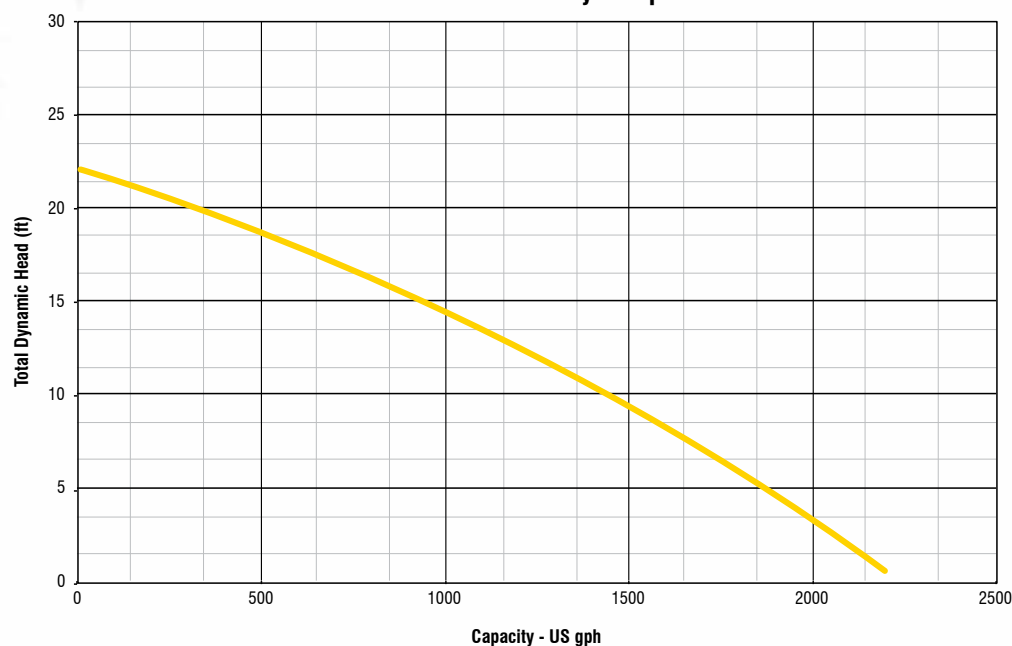


Model	Item Number	UPC	HP	Amps	Volts	Discharge	Intake	Cord Length	Gallons Per Hour at Height				Shut-Off
									0'	5'	10'	15'	
RL-MP25A	14942735	0 10121 14158 2	1/4	2.0	115	1-1/4" MNPT 3/4" GHT	Screened Bottom	10'	2200	1920	1440	900	22'

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL-MP25A	6.5"	6.25"	11.75"	7.5	0.28	168	42	4

Automatic Utility Pump



## HEAVY-DUTY SUBMERSIBLE UTILITY PUMP

### APPLICATIONS

Construction-grade, heavy-duty submersible utility pump designed for the most demanding applications such as dewatering construction sites, ponds, and ditches.

### FEATURES & BENEFITS

- Rugged construction with stainless steel motor housing and suction strainer
- Special urethane rubber impeller
- High efficiency, 115 V permanent split capacitor (PSC) motor, with thermal overload protection as well as upper and lower ball bearings for extended operation
- Double-seal system (silicon carbide primary mechanical seal with a carbon ceramic secondary seal)
- 20' extended length power cord

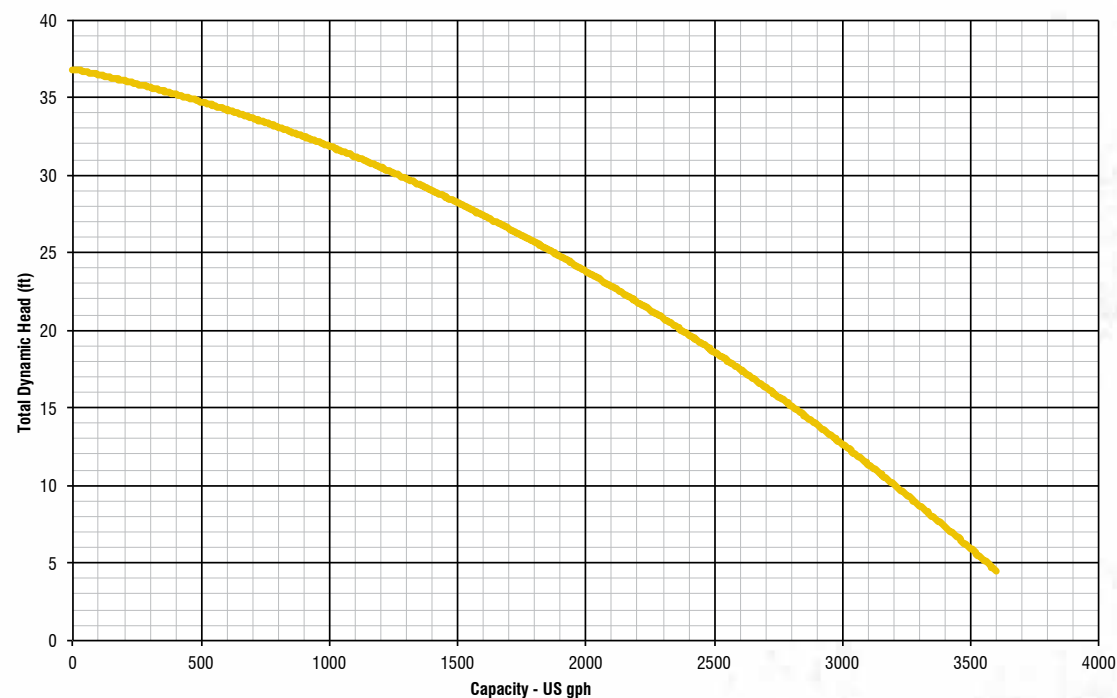


Model	Item Number	UPC	HP	Amps	Volts	Discharge	Intake	Cord Length	Gallons Per Hour at Height					Shut-Off
									4'	10'	20'	30'	37'	
RL50CON	14942722	0 10121 14585 6	1/2	2.0	115	2" MNPT	Screened Bottom	20'	3600	3240	2400	1200	0	37'

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL50CON	7.5"	9"	17.75"	26	0.69	50	25	2

### RL50CON





## UTILITY TRANSFER PUMPS

### APPLICATIONS

Ideal for draining hot water tanks, appliances, and aquariums as well as water transfer applications where easy portability is required.

### FEATURES & BENEFITS

- Portable non-submersible transfer pumps
- Choice of 115 Volt or 12 Volt DC models
- Stainless steel construction
- Includes replacement impeller kit
- MPFVK115 includes hoses and suction attachment



Model	Item Number	UPC	HP	Amps	Volts	Intake	Discharge	Cord Length	Gallons Per Hour at Height			
									0'	5'	10'	15'
MPFVK115	14942005	0 10121 11804 1	1/10	1.6	115	3/4" GHT	3/4" GHT	6'	365	330	300	280
MPFV12	14942004	0 10121 11803 4	1/10	7	12 V DC	3/4" GHT	3/4" GHT	12" leads	300	270	240	222

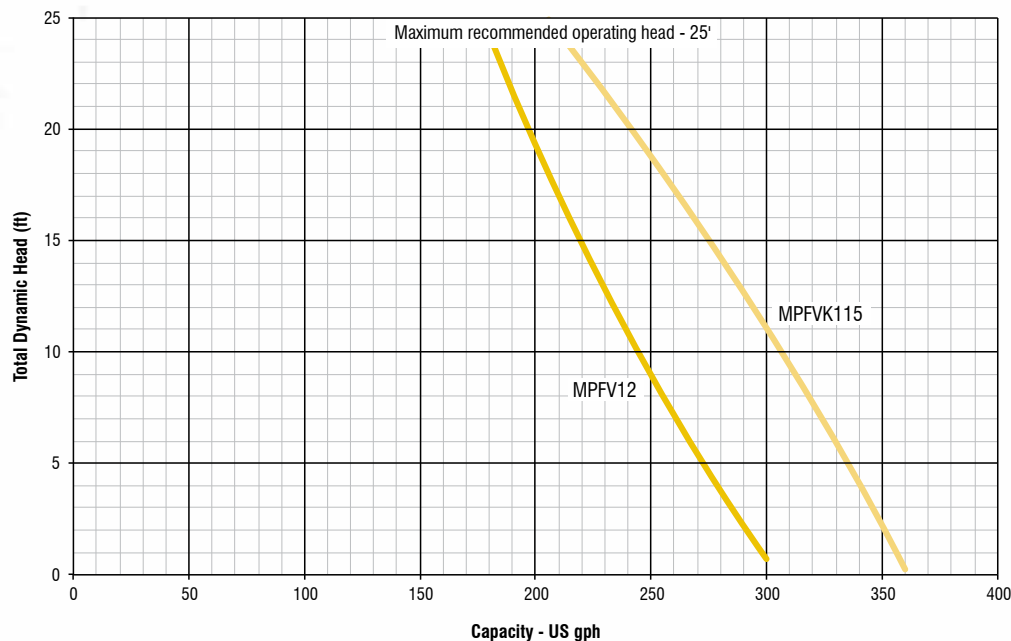
### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Master Pack Qty.
MPFVK115	11"	12"	5"	8.5	0.11	2
MPFV12	4.75"	5.5"	7.5"	4.4	0.01	6

### Master Pack Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
MPFVK115	11"	10.75"	12.5"	17	0.86	36 Master Packs	12 Master Packs	3
MPFVK12	14.75"	11"	8.25"	26.5	0.77	36 Master Packs	12 Master Packs	3

### Utility Transfer Pumps



## MULTI-PURPOSE TRANSFER PUMP

### APPLICATIONS

Ideal for boosting household water pressure to wash vehicles and driveways and for use in other water transfer and removal applications.

### FEATURES & BENEFITS

- Non-submersible utility pump
- Heavy-duty cast iron construction
- Includes 3/4" brass garden hose adapters

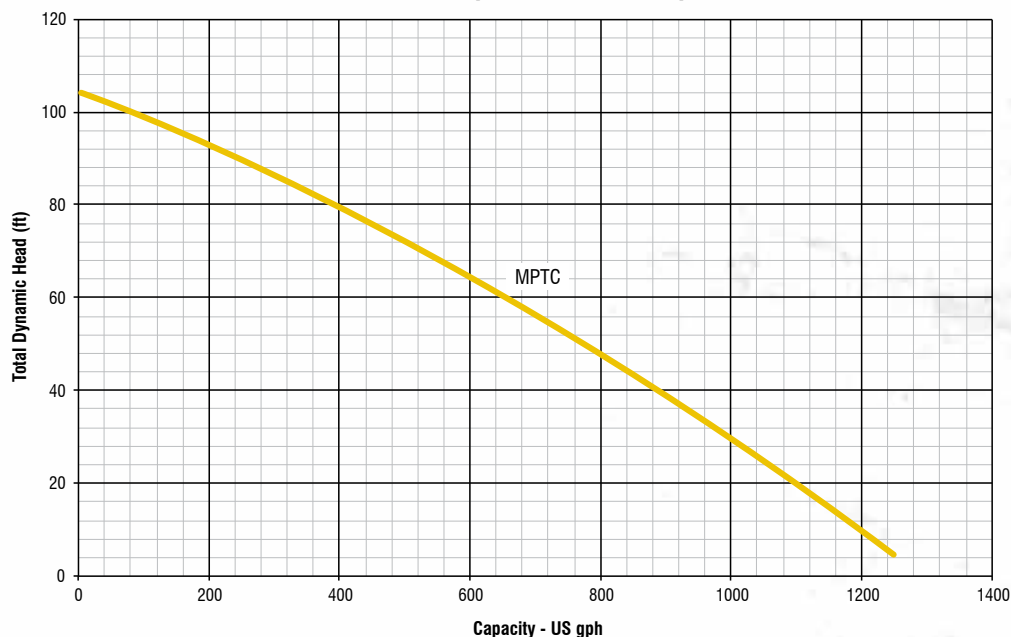


Model	Item Number	UPC	HP	Amps	Volts	Intake	Discharge	Cord Length	Gallons Per Hour at Height						Shut-Off
									0'	20'	40'	60'	80'	100'	
MPTC	14942006	0 10121 11805 8	1/2	9	115	3/4" GHT	3/4" GHT	10'	1250	1152	912	648	372	90	105'

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
MPTC	6.6"	10.6"	10.5"	18	0.43	96	24	4

Multi-Purpose Transfer Pump



## SELF-PRIMING MULTI-PURPOSE TRANSFER PUMP

### APPLICATIONS

Ideal for pumping out flooded basements, livestock watering, flood irrigation, and general dewatering where portability is preferred.

### FEATURES & BENEFITS

- Self-priming transfer pump with built-in suction check valve
- Rugged cast iron casing
- Heavy-duty ½ hp 115 Volt motor
- Self-priming to 25'
- Power cord, carry handle, and garden hose adapter included

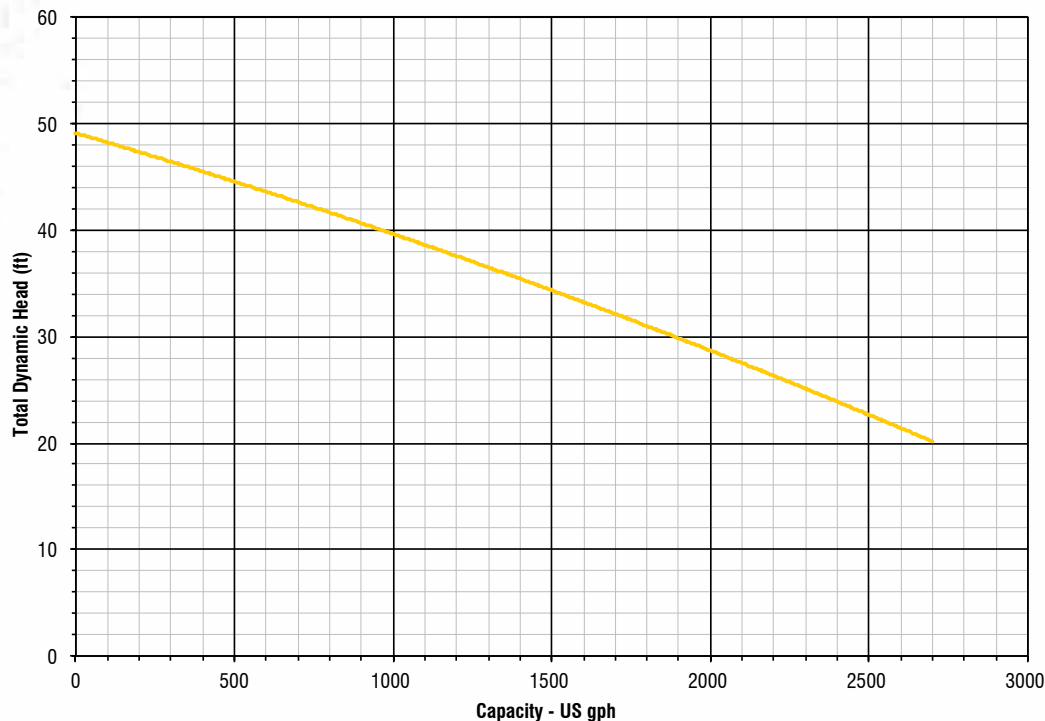


Model	Item Number	UPC	HP	Amps	Volts	Intake	Discharge	Cord Length	Gallons Per Hour at Height							Shut-Off	Max Pressure PSI	Max Flow at 5' Suction Lift
									20'	25'	30'	35'	40'	45'	49'			
RL-50	621804	0 10121 12640 4	1/2	9	115	1-1/4"	1" FNPT	8'	2700	2340	1860	1440	960	480	0	49'	21	45 gpm

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RL-50	10.25"	20.5"	11.6"	43	1.41	24	6	4

### RL-50





## CONDENSATE REMOVAL PUMPS

### APPLICATIONS



Ideal for use in removing condensation build-up from air handlers, boilers, and furnaces.

### FEATURES & BENEFITS

- Automatic operation
- High impact ABS construction
- Removable check valve
- Contains 3 inlet drain holes
- 15' and 20' models available



Tubing included with C20ST

Model	Warranty	Item Number	UPC	Amps	Volts	Discharge	Tubing	Cord Length	Gallons Per Hour at Height				Shut-Off
									0'	5'	10'	15'	
C15		14942600	0 10121 11806 5	1	115	3/8" Barb	N/A	6'	68	50	25	0	15'
C20ST		14942601	0 10121 11807 2	1.5	115	3/8" Barb	Included	6'	82	70	52	25	20'

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
C15	5.5"	12.25"	7.35"	4.5	0.29	126	21	6
C20ST	7.25"	12.25"	7.35"	6.25	0.38	90	15	6

## DRILL POWERED TRANSFER PUMP

### APPLICATIONS

A cost-effective device that uses an ordinary drill to pump out water and other liquids. Ideal for draining sinks, dishwashers, water heaters, and aquariums as well as emergency pumping of shallow flooded areas.

### FEATURES & BENEFITS

- Multi-purpose drill pump
- Thermoplastic self-priming construction for best pump performance and extended service life
- Connects to standard drill and garden hose - makes easy work out of household jobs



Model	Item Number	UPC	Length	Width	Height	Weight (lbs)	Max Flow GPH
MPDP	14942003	0 10121 11802 7	2.5"	5"	7.75"	0.5	156

### Master Pack Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Master Pack Quantity	Pallet Quantity	Qty. per Layer	Layers per Pallet
MPDP	15.5"	9"	5.5"	3	0.44	6	104 Master Packs	13 Master Packs	8



## ENGINE DRIVE PRODUCTS



# What does an engine drive pump do?

The majority of gasoline powered pumps sold in North America are referred to as general purpose, utility, or transfer. This is simply moving liquid from one point to another. Pump construction can be a variety of materials. Preference is given to lightweight and portability.

## Types of engine drive pumps

### Agricultural

Pumps designed to handle today's agricultural chemicals (fertilizer, herbicides, and pesticides) would fall into this category. Construction is either a poly derivative or cast iron. Aluminum is usually not used as it does not provide strong chemical resistance. Solids handling is not required. The seal elastomer is usually EPDM or Viton®.

### Semi-Trash

A pump is considered semi-trash if it has some solids handling capabilities. The pump impeller is usually semi-open vane clearance to pass a spherical solid ½" to ¾" diameter. The mechanical seal faces are usually of a hard material like silicon carbide. This is for abrasion resistance. Typical application is drainage, construction dewatering, etc.

### Trash

Similar in application to the above except that solids handling is typically 50% of suction port size. (Usually greater than 1" solids) and most manufacturers allow for a removable casing to allow access to internal hydraulics for cleaning and repair.

Category	Construction	Application Examples
General Purpose	Poly Aluminum Cast Iron	Water Transfer Flood Control
Agricultural	Poly Aluminum Cast Iron	Chemical Transfer (Fertilizer) Nurse Trailer
Solids Handling	Aluminum Cast Iron	Construction Semi-Trash Trash
High Pressure	Aluminum Cast Iron	Irrigation Fire Fighting



# ALUMINUM WATER TRANSFER PUMP

## APPLICATIONS

Ideal for general purpose use where portability is required such as liquid transfer and contractor de-watering applications.

## FEATURES & BENEFITS

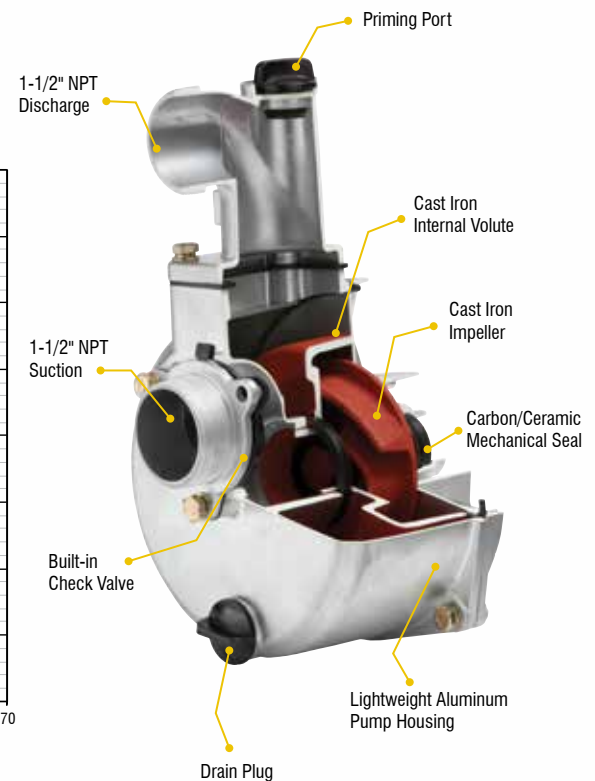
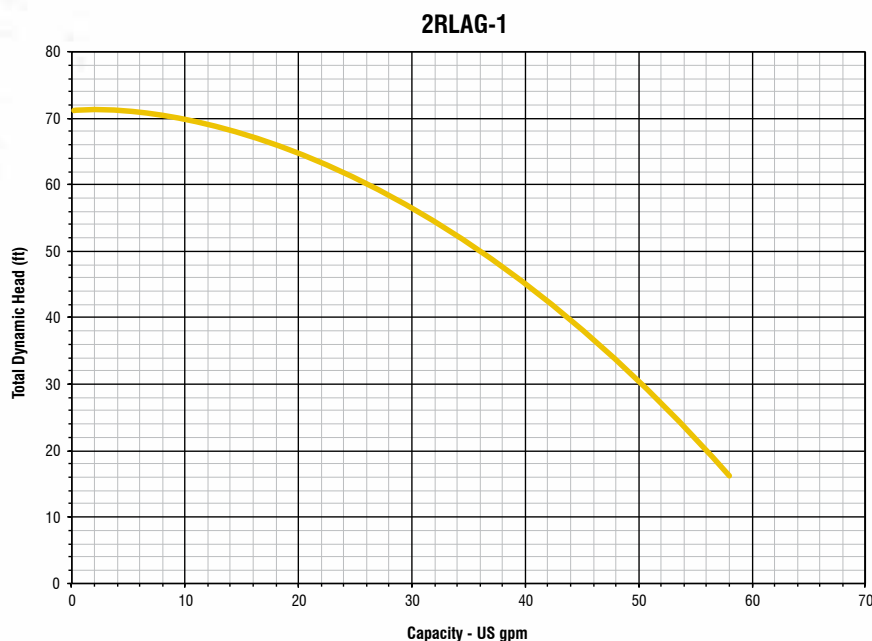
- Durable cast iron semi-open style impeller
- Lightweight aluminum construction with base and handle for portability
- Self-priming to 25' of suction lift
- Built-in check valve and fuel gauge
- EPA certified
- Includes 1" adapter



Model	Item Number	UPC	cc	Intake	Discharge	Suction Lift	Max Head	Max Flow GPM	Fuel Tank (qt)	Engine
2RLAG-1	617049	0 10121 14483 5	79cc	1-1/2" MNPT	1-1/2" MNPT	25'	79'	60 gpm	1.7	4 Stroke OHV (79cc)

## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
2RLAG-1	16.5"	20.5"	18"	43	3.52	8	4	2



## ALUMINUM WATER TRANSFER PUMP

### APPLICATIONS

Ideal for general purpose use in high volume liquid transfer and contractor de-watering applications.

### FEATURES & BENEFITS

- Powered by commercial grade Honda GX120 engine
- Durable cast iron semi-open style impeller
- Lightweight aluminum outer casing; includes heavy-duty roll frame
- Self-priming to 25' of suction lift
- Built-in check valve
- EPA certified

**POWERED by**  
**HONDA™**

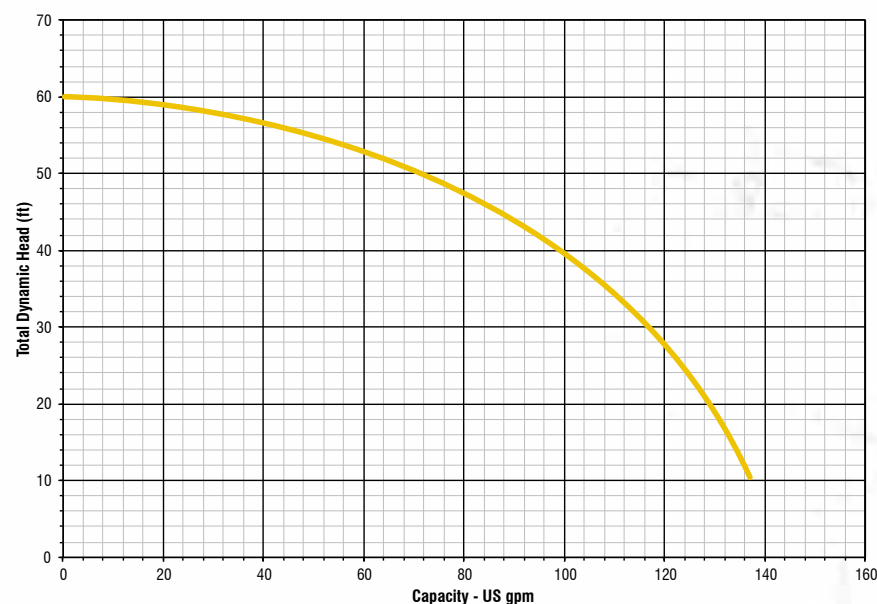


Model	Item Number	UPC	cc	Intake	Discharge	Suction Lift	Max Head	Max Flow GPM	Fuel Tank (qt)	Engine
4RLAG-2H	617053	0 10121 13751 6	118cc	2" MNPT	2" MNPT	25'	59'	143 gpm	2.1	Honda GX120 (118cc)

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
4RLAG-2H	15.25"	19.5"	15.25"	52	2.62	18	6	3

**4RLAG-2H**



Powered by HONDA™ is a registered trademark of Honda Motor Co., Ltd.

# ALUMINUM WATER TRANSFER PUMP

## APPLICATIONS

Ideal for general purpose use in high volume liquid transfer and contractor de-watering applications.

## FEATURES & BENEFITS

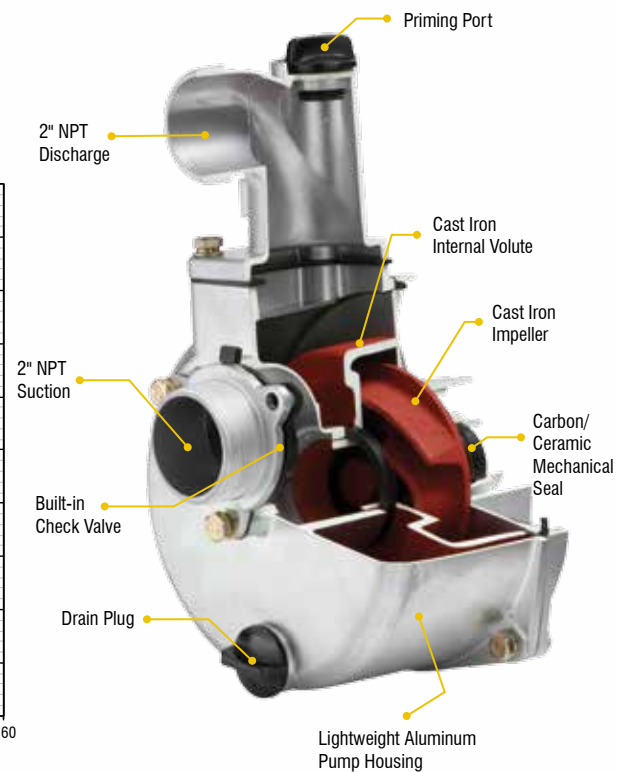
- Durable cast iron semi-open style impeller
- Lightweight aluminum outer casing: includes heavy-duty roll frame
- Self-priming to 25' suction lift
- Built-in check valve
- EPA Certified



Model	Item Number	UPC	cc	Intake	Discharge	Suction Lift	Max Head	Max Flow GPM	Fuel Tank (qt)	Engine
5RLAG-2L	617033	0 10121 14502 3	179cc	2" MNPT	2" NPT	25'	92'	150 gpm	3.8	Air Cooled, 4 Stroke OHV (179cc)

## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
5RLAG-2L	17.75"	19.75"	18.5"	62	3.75	8	4	2





# ENGINE DRIVEN CAST IRON TRANSFER PUMP

## APPLICATIONS

Ideal for liquid transfer including most agricultural chemicals and general dewatering where rugged portability is important.

## FEATURES & BENEFITS

- Heavy-duty cast iron pump casing
- Durable cast iron semi-open type impeller
- Stainless steel shaft sleeve and FKM seal
- 2" NPT suction and discharge for convenient hookup
- Powered by Briggs and Stratton 900 series engine
- Self-priming down to 25'
- Handles most liquid agricultural chemicals
- Handles up to 5/8" solid debris



Powered by

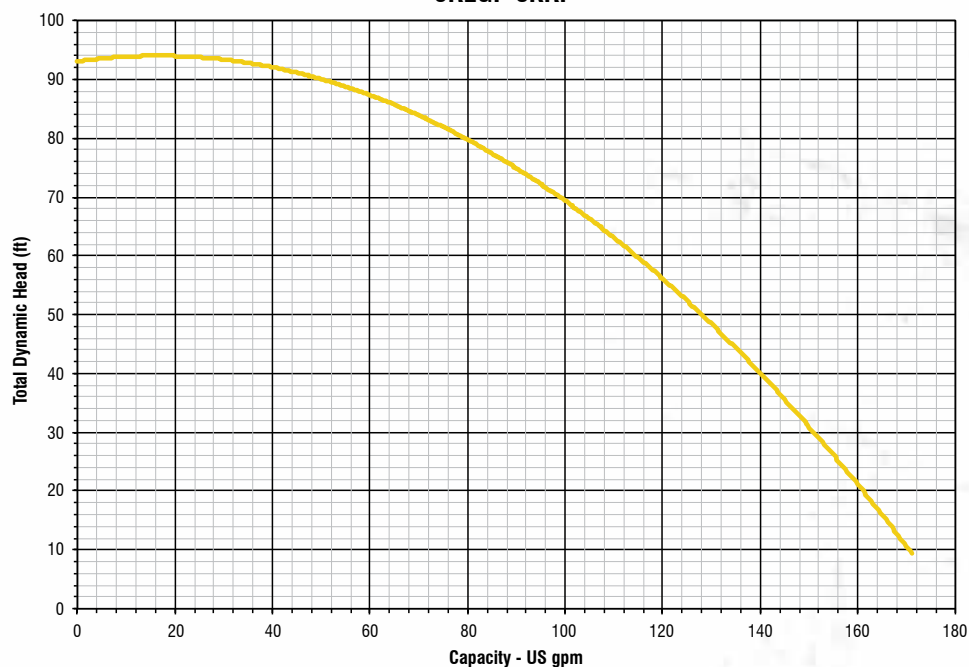
**KOHLER.**

Model	Item Number	UPC	cc	Intake	Discharge	Suction Lift	Max Head	Max Flow GPM	Fuel Tank (qt)	Engine
5RLGF-8KRF	617032	0 10121 14501 6	196cc	2" FNPT	2" FNPT	25'	95'	170 gpm	3.8	KOHLER, Air Cooled, 4 Stroke, OHV (196cc)

## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
5RLGF-8KRF	17.5"	21"	18"	74	3.93	8	4	2

## 5RLGF-8KRF



Powered by KOHLER® is a registered trademark of KOHLER Co.

# CAST IRON CENTRIFUGAL PRESSURE PUMP

## APPLICATIONS

Ideal for a wide variety of pressure boosting, liquid agricultural chemical sprayer, and lawn and turf irrigation applications.

## FEATURES & BENEFITS

- Heavy-duty cast iron pump casing
- Durable cast iron semi-open type impeller
- Stainless steel shaft sleeve and FKM seal
- Powered by Briggs and Stratton 900 series engine
- Pressures to 72 psi max
- 2" NPT suction and discharge for convenient hookup

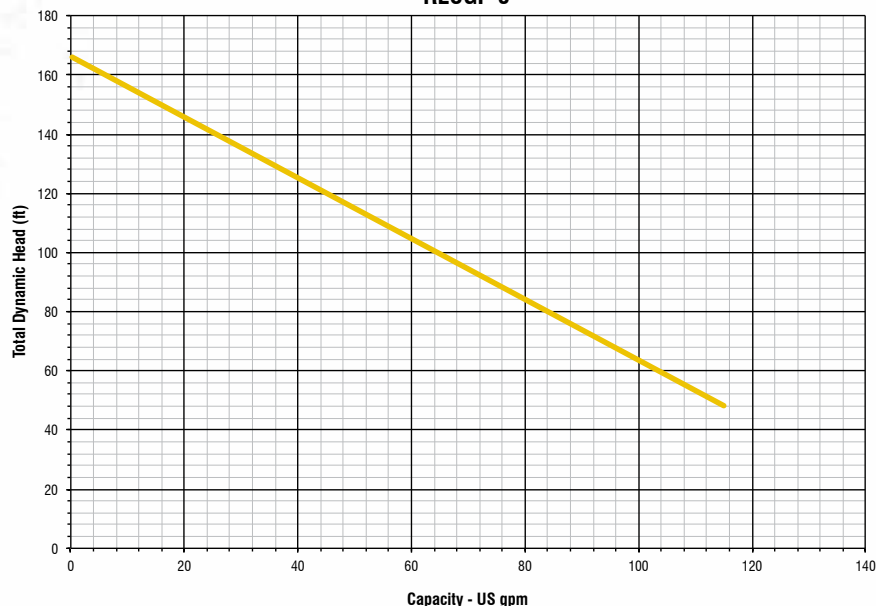


Model	Item Number	UPC	cc	Intake	Discharge	Suction Lift	Max Height	Max Flow GPM	Fuel Tank (qt)	Engine
RLCGF-5	615093	0 10121 12513 1	205cc	2" FNPT	2" FNPT	25'	166'	120 gpm	3.2	B&S 900 Series (205cc)

## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
RLCGF-5	18"	17"	17.5"	68	3.10	8	4	2

**RLCGF-5**



# THERMOPLASTIC AG CHEMICAL & TRANSFER PUMP

## APPLICATIONS

Ideal for sprayer applications such as liquid fertilizers and ag chemicals.

## FEATURES & BENEFITS

- Lightweight corrosion-resistant construction
- Self-priming to 25' of suction lift
- Integrated check valve and carry handle
- Rubber feet to dampen vibration
- EPA certified
- 3.8 qt. fuel tank
- Carbon ceramic with EPDM elastomer seal

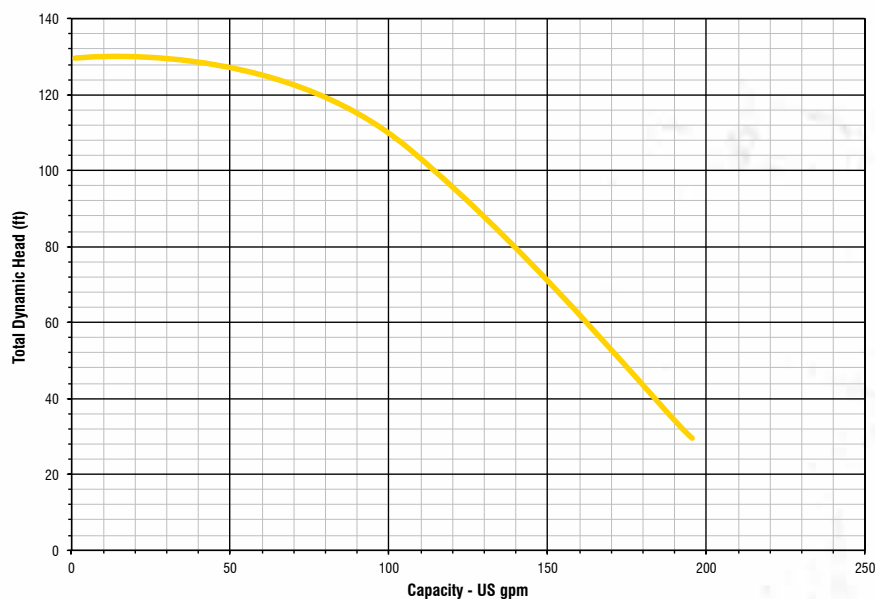


Model	Item Number	UPC	cc	Intake	Discharge	Suction Lift	Max Height	Max Flow GPM	Fuel Tank (qt)	Engine
6RLPG-2U	617070	0 10121 14086 8	212cc	2" FNPT	2" FNPT	25'	140'	195 gpm	3.8	4 Stroke OHV (212cc)

## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
6RLPG-2U	20"	17.5"	16"	46.5	3.24	12	4	3

6RLPG-2U





# THERMOPLASTIC AG CHEMICAL & TRANSFER PUMP

## APPLICATIONS

Ideal for sprayer applications such as liquid fertilizers and ag chemicals.

## FEATURES & BENEFITS

- Powered by Kohler Courage 6.5 hp engine
- Lightweight corrosion-resistant construction
- Self-priming to 25' of suction lift
- Integrated check valve
- Includes heavy-duty roll frame
- EPA certified
- Carbon ceramic mechanical seal with EPDM elastomers

Powered by

# KOHLER®

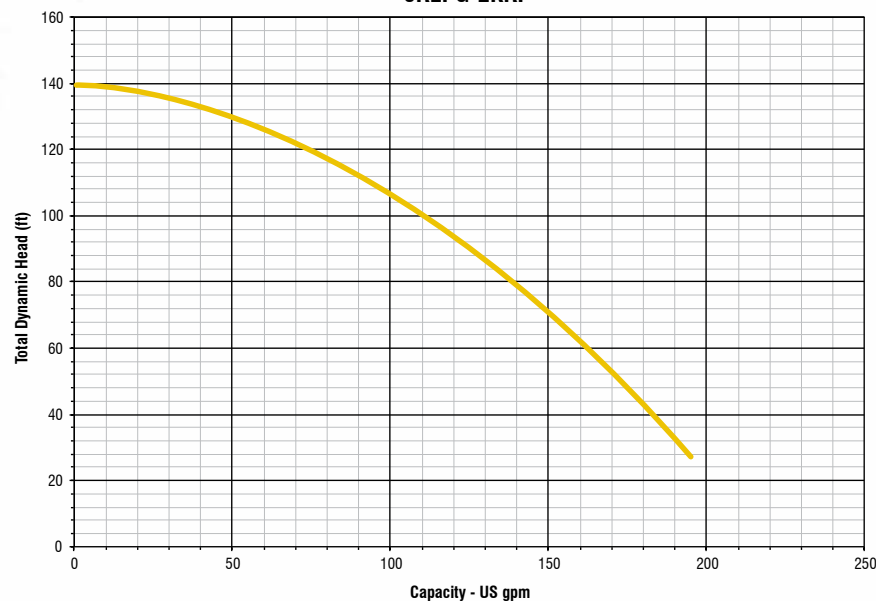


Model	Item Number	UPC	cc	Intake	Discharge	Suction Lift	Max Height	Max Flow GPM	Fuel Tank (qt)	Engine
6RLPG-2K	617071	0 10121 14413 2	196cc	2" FNPT	2" FNPT	25'	140	195 gpm	3.8	Kohler Courage (196cc)

## Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
6RLPG-2KRF	17.25"	20.5"	18"	47.5	3.68	8	4	2

6RLPG-2KRF



Powered by KOHLER® is a registered trademark of KOHLER Co.

## ALUMINUM SEMI TRASH PUMPS

### APPLICATIONS

Ideal for high volume transfer and dewatering. Can handle liquid slurries including sand, pebbles, and suspended solids less than 1/2" in diameter.

### FEATURES & BENEFITS

- Durable cast iron semi-open style impeller
- Lightweight aluminum outer casing: includes heavy-duty roll frame
- Wear resistant silicon carbide mechanical seal
- Self-priming to 25' of suction lift
- Built-in check valve
- EPA certified



6RLAG-3ST



6RLAG-2LST

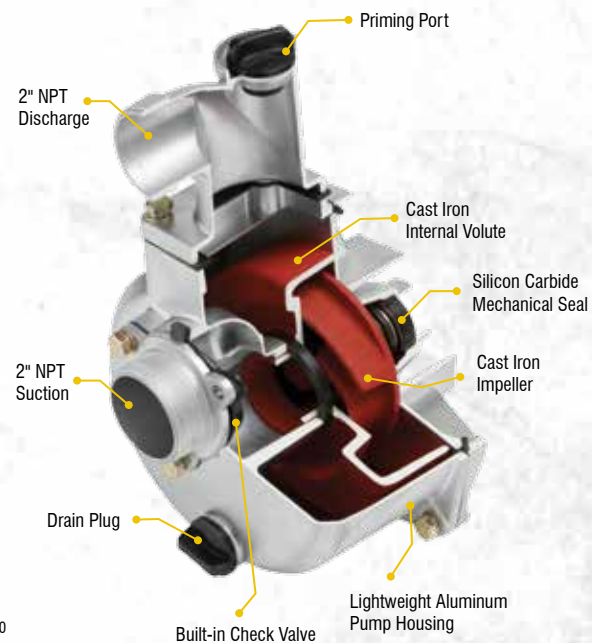
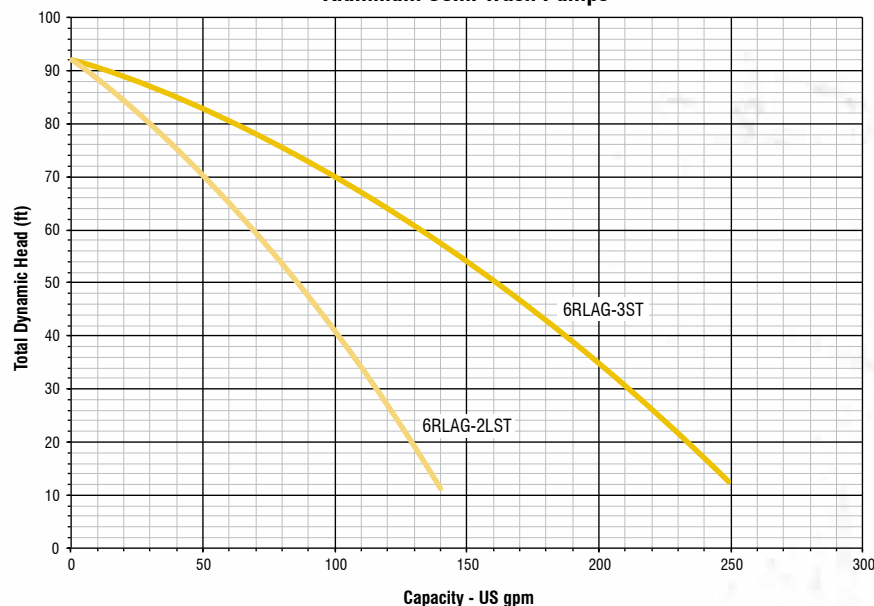


Model	Item Number	UPC	cc	Intake	Discharge	Suction Lift	Max Head	Max Flow GPM	Fuel Tank (qt)	Engine
6RLAG-2LST	617034	0 10121 14503 0	208cc	2" MNPT	2" MNPT	25'	92'	150	3.8	4 Stroke OHV (208cc)
6RLAG-3ST	617054	0 10121 13752 3	208cc	3" MNPT	3" MNPT	25'	85'	264	3.8	4 Stroke OHV (208cc)

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
6RLAG-2LST	17.5"	20"	18.25"	52	3.70	8	4	2
6RLAG-3ST	16.25"	20.5"	17.5"	66	3.37	8	4	2

Aluminum Semi Trash Pumps



## ALUMINUM TRASH PUMP

### APPLICATIONS

Ideal for high volume water transfer and construction grade dewatering applications. Can handle liquid slurries containing sand, small rocks, and other debris less than 1-1/4" in diameter.

### FEATURES & BENEFITS

- Powered by 208cc 4 stroke air cooled OHV engine
- Removable aluminum outer casing with cast iron inner volute and impeller for durability
- Silicon carbide seal for abrasion resistance and trash application
- Handles up to 1-1/4" solids
- Includes heavy-duty roll frame
- EPA certified

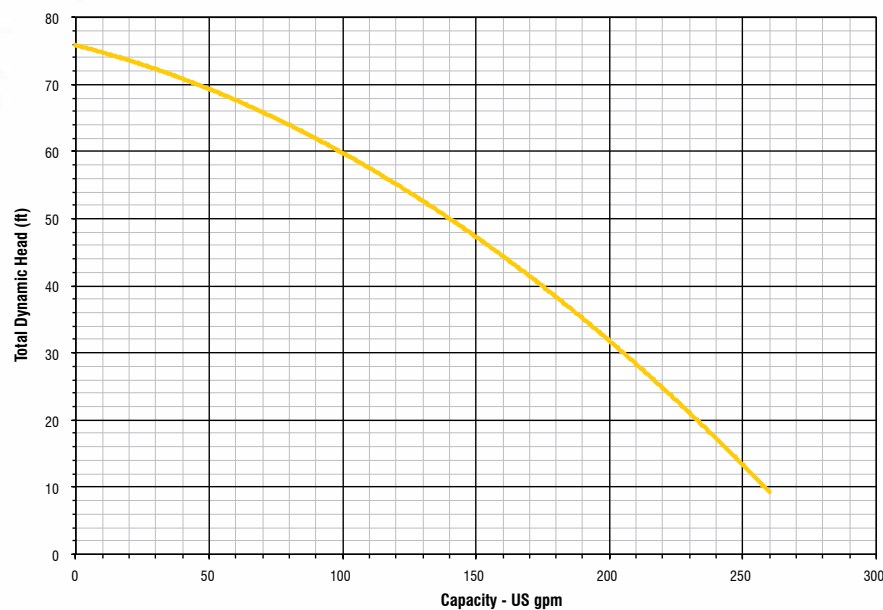


Model	Item Number	UPC	cc	Intake	Discharge	Suction Lift	Max Height	Max Flow GPM	Fuel Tank (qt)	Engine
6RLAG-3LTT	617038	0 10121 14507 8	208	3" NPT	3" NPT	25'	75'	285 gpm	3.8	Air Cooled, 4 Stroke OHV (208cc)

### Carton Specifications

Model	Length	Width	Height	Weight (lbs)	Carton Cubes (cu ft)	Pallet Quantity	Qty. per Layer	Layers per Pallet
6RLAG-3LTT	19.5"	23"	18.5"	95	3.74	8	4	2

6RLAG-3LTT





# ACCESSORIES

## CLEAN WATER ACCESSORIES

Item Number	UPC	Wt (lbs)	Description
640207	0 10121 13154 5	0.35	Priming wizard
640141	0 10121 13082 1	0.70	Pump/Tank mounting base
600528	0 10121 12267 3	5.55	RJC-75/100 Injector kit
640106	0 10121 13073 9	0.10	Pressure gauge 0-100
640116	0 10121 13076 0	0.35	Pressure relief valve 1/2" x 1/2"
640108	0 10121 13074 6	1.00	Pressure switch 30/50, 1/4" NPTF
640109	0 10121 13075 3	1.00	Pressure switch 30/50, 1/4" barb
640134	0 10121 13081 4	1.00	Pressure switch 30/50 1/4" NPTF M4
640221	0 10121 13172 9	1.00	Pressure switch 30/50 mini barb
640142	0 10121 13083 8	10.00	Well point 1-1/4" x 30", 60 gauge
640143	0 10121 13084 5	10.00	Well point 1-1/4" x 30", 80 gauge
640166	0 10121 13090 6	0.25	Cable splice kit for 4" submersible
600526	0 10121 12266 6	7.00	RJC-33/50 Injector kit

## SUMP ACCESSORIES

Item Number	UPC	Wt (lbs)	Description
599303	0 10121 14084 4	2.25	SPDK, sump hose kit 1-1/2" & 1-1/4"
14941004	0 43719 00113 5	0.10	MPFVRIK - replacement impeller kit for MPFVK115 and MPFV12
14942901	0 10121 12014 3	0.70	SCV114 - 1-1/4" plastic sump pump check valve
14942903	0 10121 12024 2	1.50	RSNB9 - piggyback style replacement wide angle tethered float switch
640171	0 10121 12196 6	1.25	Float switch - piggyback 10'
640172	0 10121 12200 0	1.80	Float switch - piggyback 20'
14942904	0 10121 12015 0	1.00	SRVS - vertical float switch - piggyback 10'
14942914	0 10121 12019 8	2.00	WCV2 - sewage check valve
640175	0 10121 12202 4	14.00	RLSB-03 sewage basin - 35 gal poly
577155	0 10121 77155 0	0.25	VS-P2800-RS - column pump replacement switch

## ENGINE DRIVE ACCESSORIES

Item Number	UPC	Wt (lbs)	Description
617200	0 10121 13999 2	23.50	2HKP - 2" Hose kit
617201	0 10121 14001 1	52.00	3HKM - 3" Hose kit

# MARKETING PROGRAM

Red Lion's well thought-out, professional marketing program is designed to grab the consumer's attention and provide the consumer with the information they need. Our trilingual carton artwork is designed with the consumer in mind. Features and benefits, typical applications, tools needed, specifications, and warranty information are clearly laid out.

## COLOR-CODED TO IDENTIFY PUMP CATEGORY



## PACKAGING FEATURES



## MARKETING MATERIALS

Color coordinated and informative marketing materials are designed to assist customers and retail staff in the decision making process, identifying the product that best suits their individual needs.



# MARKETING PROGRAM

## MERCHANDISING PLANOGRAMS

Merchandising planograms are available for all retail store formats. These planograms focus retailers on the right product mix and assist in determining stock requirements. We have ready-made planograms for 4', 8', 12', and 16' gondolas. You can mix and match these easily to focus on your desired market or we can customize a planogram just for you to meet the needs for both store size and regional product preferences.





# TROUBLESHOOTING GUIDE

## RJS – SELF-PRIMING SHALLOW WELL JET PUMPS

- a. Motor will not start:
  - 1. No power to pressure switch due to blown fuses, open switches or loose connections.
  - 2. Pump pressure switch not closed.
- b. Pump fails to deliver water:
  - 1. Pump not completely primed.
  - 2. Suction lift is too great.
  - 3. Foot valve is either not submerged, buried in mud or plugged.
- c. Pump loses prime:
  - 1. Air leaks in suction line.
  - 2. Well drawn down too far.
  - 3. Faulty foot valve.
- d. Pump delivers water but not at rated capacity:
  - 1. Leaks in suction or discharge line.
  - 2. Foot valve, suction line, impeller or nozzle are partially plugged.
  - 3. Suction lift is greater than recommended.
  - 4. Improper impeller rotation or low speed.
  - 5. Venturi or diffuser is plugged.
  - 6. Motor is wired for improper voltage.
  - 7. Low line voltage at motor.
  - 8. Motor does not come off starting windings (improper motor switch adjustment).
- e. Pump starts and stops too often:
  - 1. Faulty air volume control.
  - 2. Air leaks in tank above the water level.
  - 3. Incorrect setting on pressure switch.
  - 4. Tank is water logged or too small for application.

## RJC – SELF-PRIMING CONVERTIBLE JET PUMPS

- a. Motor will not start:
  - 1. No power to pressure switch due to blown fuses, open switches or loose connections.
  - 2. Pump pressure switch not closed.
- b. Pump fails to deliver water:
  - 1. Pump not completely primed.
  - 2. Suction lift is too great.
  - 3. Foot valve is either not submerged, buried in mud or plugged.
  - 4. Restrictor valve is fully closed.
- c. Pump loses prime:
  - 1. Air leaks in suction line.
  - 2. Well drawn down too far and requires a tail-pipe.
  - 3. Faulty foot valve.
- d. Pump delivers water but not at rated capacity:
  - 1. Leaks in suction or discharge line.
  - 2. Foot valve, suction line, impeller or nozzle are partially plugged.
  - 3. Suction lift is greater than recommended.
  - 4. Improper setting of control valve on deep well units.
  - 5. Improper impeller rotation or low speed.
  - 6. Venturi or diffuser is plugged.
  - 7. Motor is wired for improper voltage.
  - 8. Low line voltage at motor.
- e. Pump starts and stops too often:
  - 1. Air leaks in tank above the water level.
  - 2. Incorrect setting on pressure switch.
  - 3. Tank is water logged or incorrectly charged.
  - 4. Foot valve leaks or is stuck open.

## Sand Point Applications

Trouble	Possible Solution
Pump noisy - output requirement exceeds available capacity.	Install/adjust valve on discharge to reduce output
Pump runs hot/won't shut off. Can not build pressure due to lack of water at source.	Install low pressure cut-off switch to shut down pump prior to critical failure.
Changes in requirement not being met by current system (added bathroom, irrigations, etc.)	Increase pressure cut-off switch to offset peak period demand from insufficient source.

## Recommended Maximum Flow Rates

Pipe Diameter	Gallons Per Hour (GPH)	Gallons Per Minute (GPM)
3/4"	750	12.5
1"	1000	17
1-1/4"	2100	35
1-1/2"	3000	50
2"	4800	80
3"	9000	150
4"	16000	267

# TROUBLESHOOTING GUIDE

## PRE-CHARGED PRESSURE TANKS

### Can I install my Red Lion diaphragm pressure tank on its side?

Side installations are acceptable up to the RL44 size. We do not recommend horizontal installations for any tanks larger than the RL44.

### What is the warranty on Red Lion tanks?

All Red Lion tanks carry a 5 year limited warranty from the date of manufacture on the original tank.

### My tank was just installed and the water has a funny taste – what should I do?

Flush the new tank by allowing water to flow through three or four pump cycles. If the taste continues, you should probably have the source water tested.

### Can I use chlorinated water with my Red Lion tank?

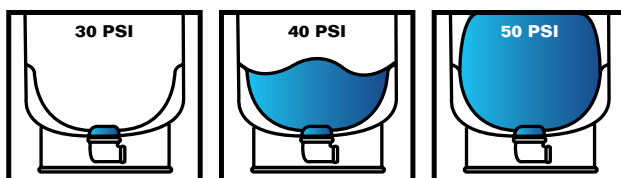
Of course. Red Lion tanks are designed with the knowledge that chlorine is often used to periodically treat a well.

### What is drawdown?

Drawdown refers to the amount of water that evacuates the tank before the pressure switch will activate the pump. Drawdown is affected by the pump, the size of the tank, and the pressure settings that govern your water system.

#### Tank system operation

1. Pump comes on and begins to fill tank.
2. Pump continues to run compressing air charge in tank.
3. Pump shuts off. Drawdown water is available on demand.



### What is pre-charge pressure?

Pre-charge pressure refers to the amount of air in psi that is pumped into a tank prior to installation – usually at the factory. Most tanks are provided with a 28-psi pre-charge (38 psi in the RL81 to RL119 sizes). The pre-charge is the "spring" that helps to create water pressure. As the diaphragm fills with water, it compresses the pre-charge. In a 30/50 system, the pump will continue to propel water into the tank until the pressure in the tank reaches 50 psi.

### How much pressure (pre-charge) should be in my tank?

Your tanks should be pressurized to 2 psi less than the cut-in pressure setting (for example, if your pressure settings are 30/50, then your cut-in pressure setting is 30 psi and your tank should have a 28 psi pre-charge).

### How do I check or change my pre-charge?

You must completely drain the tank to check pre-charge. To do this, shut the power off to the pump and open (turn-on) a faucet in the house. This will drain the tank and not allow it to refill. On the top of the tank you will find an air valve (similar to the air valve on your tires) – use a tire pressure gauge to check the air pressure.

# TROUBLESHOOTING GUIDE

## 4" SUBMERSIBLE WELL PUMPS

Trouble	Possible Cause	Corrective Action
Motor will not start but does not blow fuses. <b>WARNING!</b> Hazardous voltage. Can shock, burn or cause death. Qualified electricians should work on electrical service.	No voltage to motor.	With a voltmeter check: 1) fuse box to make sure full voltage is available; 2) pressure switch terminals to make sure pressure switch is passing voltage correctly; and 3) terminal strips in pump control box or disconnect switch box to make sure voltage is available there. On 1-½ through 3 hp: push red overload reset button(s) on the bottom of the control center.
	Cable splices or motor windings may be grounded, shorted or open-circuited.	Consult certified electrician or service technician. <b>Do not attempt to disassemble pump or motor.</b>
	Faulty pressure switch.	Check pressure switch; replace if necessary.
	3-wire only; open circuit in pump control box; faulty connections; faulty wires.	Examine all connections and wires; examine terminal strips in the control center (3-wire only); repair if necessary.
	3-wire only; cable leads improperly connected in the control center.	Check wiring diagram on control center panel and color coding of drop cable.
Pressure switch fails to shut off pump.	Voltage is too low; motor will run slowly, causing low discharge pressure (head) and high operating current draw.	Have a certified electrician verify voltage at the electrical disconnect box (2-wire) or control center (3-wire) while the pump is operating. If the voltage is low, the power company may need to raise it or installation may require larger wire. Discuss this with the power company or a certified electrician. Check voltage with a recording meter if trouble reoccurs.
	Faulty pressure switch.	Replace switch.
	Drop pipe is leaking.	Raise one length at a time until the leak is found. When water stands in the pipe, there is no leak below this point.
	Water level in the well may become too low when pump is running.	Lower the pump further into the well, but make sure it is at least five feet from the bottom of the well. Install a control valve in the discharge pipe between the pump and pressure tank. Use the control valve to restrict the flow until the discharge rate does not exceed well recovery rate. <b>WARNING! To prevent the possibility of dangerously high pressure, install a relief valve in the discharge pipe between the pump and flow restriction valve. The relief valve must be capable of passing full pump flow at 75 psi.</b>
Fuses blow or overload protector trips when motor is running.	Low or high voltage.	While the motor is running, voltage should not exceed plus 5% or minus 5% of rated voltage shown on motor nameplate. Plus 3% or minus 3% in Canada. Call your power company to adjust line voltage if it is not within these limits.
	Wire size is too small. Improperly connected in the pump control box.	See cable selection guide in the technical data section and make sure the wire sizes match specifications in table.
	Cable splices or motor windings may be grounded, shorted or open-circuited.	Consult certified electrician or a service technician to determine if this is the cause of the problem or not. <b>Do not attempt to disassemble the pump or motor.</b>
	3-wire only; high ambient (atmospheric) temperature.	Make sure the pump control box is installed out of direct sunlight.
	3-wire only; pump control box wrong horsepower or voltage for installation.	Compare horsepower and voltage rating of motor (from motor nameplate) with those of the pump control box (from pump control box nameplate). These numbers must match.
Air or milky water discharges from your faucets.	Well water may be gaseous.	If your well is naturally gaseous and your system has a standard tank, remove the bleeder orifices and plug the tees. If the condition is serious, check with a certified well professional.



# TROUBLESHOOTING GUIDE

Trouble	Possible Cause	Corrective Action
Your pump delivers little or no water.	Water level in a low producing well drops too low while pump is operating, causing it to air lock (resulting in loss of prime and possibly serious damage to the pump).	Lower the pump further into the well, but make sure it is at least five feet from the bottom of the well. Install a control valve in the discharge pipe between the pump and pressure tank. Use the control valve to restrict the flow until the discharge rate does not exceed well recovery rate. <b>WARNING! To prevent the possibility of dangerously high pressure, install a relief valve in the discharge pipe between the pump and flow restriction valve. Relief valve must be capable of passing full pump flow at 75 psi.</b>
	Intake screen is partially plugged.	Lime or other matter in the water may build up on screen. Pull pump and clean screen.
	Check valve(s) may be stuck.	Make sure that the built-in check valve in the pump and any check valves in the discharge line are free to open properly.
	Voltage is too low; the motor runs slowly, causing low discharge pressure (head) and high operating current draw.	Have a certified electrician verify voltage at the electrical disconnect box (2-wire) or control center (3-wire) while the pump is operating. If the voltage is low, the power company may need to raise it or installation may require larger wire. Discuss this with the power company or a certified electrician. Check voltage with a recording meter if trouble reoccurs.
Pump starts too frequently.	Leak in the pressure tank or plumbing.	Check all connections with soap suds for air leaks. Fix any leaks you find. Check the plumbing for water leaks. Fix any leaks you find.
	Pressure switch is defective or out of adjustment.	If necessary, replace switch.
	Check valve is leaking.	Inspect valves and replace if necessary.
	Tank is waterlogged.	Captive air tanks: Check the tank for leaks; correct if possible. Pre-charge tanks to 18 psi with a 20-40 psi switch, 28 psi for a 30-50 switch, 38 psi for a 40-60 psi switch, etc. Standard tanks: Check the tank for leaks; correct if possible. Check bleeder orifices and clean bleeders; replace if necessary.
	Drop pipe leaking.	Raise one length of pipe at a time until the leak is found. When water stands in the pipe there is no leak below this point.
	Pressure switch is too far from the tank.	Move the pressure switch to within one foot of the tank.
Fuses blow or overload protector trips when motor starts.	Low or high voltage.	While the motor is running, voltage should not exceed plus 5% or minus 5% of rated voltage shown on motor nameplate. Plus 3% or minus 3% in Canada. Call your power company to adjust line voltage if it is not within these limits.
	Wire size is too small. Improperly connected in the pump control box.	See cable selection guide in the technical data section and make sure the wire sizes match specifications in table.
	Cable splices or motor windings may be grounded, shorted or open-circuited.	Consult certified electrician or a service technician to determine if this is the cause of the problem or not. <b>Do not attempt to disassemble the pump or motor.</b>
	3-wire only; cable leads may be improperly connected in pump control box, pressure switch or fused disconnect switch.	Check wiring diagram on pump control box and color coding of drop cable.
	3-wire only; there may be a broken wire in the pump control box.	Employ a certified electrician to examine all connections and wiring in control panel. If necessary, repair them.
	3-wire only; starting or running capacitor in control box may be defective or vented (blown out).	Inspect capacitors. Employ a certified electrician to check capacitors and replace them if necessary. <b>WARNING! Hazardous voltage; can shock, burn or cause death. Capacitors may still carry voltage charges even after being disconnected from wiring. Have them checked by a certified electrician.</b>

# TROUBLESHOOTING GUIDE

## SUBMERSIBLE UTILITY & SUMP PUMPS

Trouble	Possible Cause	Corrective Action
Motor does not run.	Blown fuse.	Replace fuse.
	Tripped circuit.	Reset.
	Disconnected plug.	Reinstall pump.
	Corroded plug.	Clean prongs.
	Tripped overload.	Allow pump to cool, investigate cause (i.e. jammed impeller).
	Defective switch.	Replace switch.
	Defective motor.	Replace pump.
	Float in improper position.	Check for freedom of movement.
Motor hums but flow reduced or none at all.	Impeller jammed.	Remove bottom plate and clean.
	Plugged check valve.	Remove valve, clean or replace.
	Partially blocked inlet.	Clean inlet.
	Line leak.	Repair line.
	Worn impeller.	Replace pump/repair.
	Defective motor.	Replace pump.
Pump runs continuously.	Plugged inlet.	Clean inlet.
	Defective switch.	Replace switch.
	Float obstruction.	Adjust position of pump.
	Plugged check valve.	Remove valve, clean or replace.

### CAUTION

A plugged pump inlet can be mistaken for a faulty switch. If the pump runs continuously or for extended periods of time between turn offs, first check for a partially plugged inlet.

## RL-S - CAST IRON SURFACE EFFLUENT PUMP & RL-50 - SELF-PRIMING MULTI-PURPOSE TRANSFER PUMP

- a. Pump fails to prime or primes slowly:
  1. Leaks in suction line.
  2. Loose gasket connection due to shrinkage of the gasket.
  3. Collapsed or clogged suction line.
  4. Not enough water in the casing for priming.
  5. Suction lift is too great.
- b. Reduced pressure or capacity:
  1. Partially collapsed or clogged suction line.
  2. Clogged impeller.
  3. Leaks in the suction line.
  4. Strainer or end suction hose is not properly submerged.
  5. Suction line is improperly installed, resulting in air pockets in the suction line.
  6. Suction lift is too great (the greater the suction lift, the lower the capacity and pressure).
  7. Worn parts, such as the impeller or the pump casing.

# TROUBLESHOOTING GUIDE

## RJSE - CAST IRON SPRINKLER UTILITY PUMP

- a. Motor will not start:
  - 1. No power to pressure switch due to blown fuses, open switches or loose connections.
  - 2. Pump pressure switch not closed.
- b. Pump fails to deliver water:
  - 1. Pump not completely primed.
  - 2. Suction lift is too great.
  - 3. Foot valve is either not submerged, buried in mud or plugged.
  - 4. Convertible jet only; restrictor valve is fully closed.
- c. Pump loses prime:
  - 1. Air leaks in suction line.
  - 2. Well drawn down too far.
  - 3. Faulty foot valve.
- d. Pump delivers water but not at rated capacity:
  - 1. Leaks in suction or discharge line.
  - 2. Foot valve, suction line, impeller or nozzle are partially plugged.
  - 3. Suction lift is greater than recommended.
  - 4. Improper impeller rotation or low speed.
  - 5. Venturi or diffuser is plugged.
  - 6. Motor is wired for improper voltage.
  - 7. Motor does not come off starting windings (improper motor switch adjustment).

## RLSP/RLHE SPRINKLER PUMPS

Trouble	Possible Cause	Corrective Action
Failure to pump.	Pump not properly primed.	Make sure pump casing and suction line are full of water. See priming instructions.
	Speed too low.	Employ a certified electrician to check voltage at motor terminals and at meter when pump is operating. If low, refer to wiring instructions or check with your power company. Check loose connections. <b>WARNING! All wiring, electrical connections, and system grounding must comply with the National Electrical Code (NEC) and with any local codes and ordinances.</b>
	Total head is greater than what pump can handle.	Reduce total head or use a higher head pump.
	Suction lift is too great.	Locate pump closer to source of water. Make sure suction piping is large enough.
Capacity and/or head is reduced.	Air pockets or leaks in suction line.	Check suction piping.
	Clogged impeller.	Remove impeller and clean.
	Strainer is too small or clogged.	Use larger strainer or clean.
	Insufficient submergence of suction line.	Add lengths of suction pipe to keep submerged end well below the water surface, or move the pump closer to source of liquid.
	Excessive suction lift.	If caused by suction pipe friction, enlarge piping. Otherwise, move pump closer to water level.
	Total head is greater than what pump can handle.	Reduce total head or use a higher head pump.
	Excessively worn impeller.	Replace impeller.
Pump loses prime.	Air leaks in suction line.	Check suction piping.
	Excessive lift and operating too near shut-off point.	Move pump nearer water level.
	Water level drops while pumping, uncovering suction piping.	Check water supply. Add length of pipe to suction to keep submerged end under water, or move the pump closer to source of liquid.
Mechanical troubles and noise.	Bent shaft and/or damaged bearings.	Take motor to authorized motor repair shop.
	Suction and/or discharge piping not properly supported and anchored.	See that all piping is supported to relieve strain on pump assembly.

# TROUBLESHOOTING GUIDE

## RLAG & RLGf – ENGINE DRIVEN TRANSFER PUMPS

Trouble	Possible Cause	Corrective Action
Pump will not pump.	Air leak in suction line.	Make sure suction hose is double clamped at joints, clamps are tight, fittings have thread compound and are tight, with no nicks or cuts in hose.
	The suction and/or discharge line(s) may be blocked, or the valve(s) are closed, faulty and/or blocked.	Check to see that the lines and valves are in good working order.
	The end of the suction line is not submerged.	Increase its length, or move pump closer to source of liquid.
	Total head is greater than what pump can handle.	Reduce total head or use a higher head pump.
Pump will not prime.	Excessive suction lift (*1)	Move the pump closer to liquid source.
Priming takes a long time.	Suction line is quite long.	See priming instructions in owner's manual.
	Air pockets or leaks in the suction line.	Check the line for loose connections.
Pump does not perform as well as it should.	Flow is restricted due to: a. Debris build-up. b. Faulty or semi-open valve(s). c. Pipe or hose used is smaller than the thread sizes on the pump.	a. Clean the lines and fittings. b. Check to see that the valves are in good working order. c. Increase the size of hose or pipe to reduce friction losses.
	Insufficient submergence of the end of the suction line.	Add lengths of suction pipe to keep submerged end well below the water surface, or move the pump closer to source of liquid.
	Excessively worn impeller (*2).	Replace impeller.
	Seal is damaged (*3). Liquid will be leaking through the middle of the adapter.	Replace the seal.
	Air pockets or leaks in the suction line.	Check the line for loose connections.
	Clogged impeller.	Remove casing to clean out.
	Engine throttle is in SLOW position.	Move throttle to FAST position.
Pump loses prime.	Water level drops while pumping, uncovering suction piping.	Check water supply. Add length of pipe to suction to keep submerged end under water, or move the pump closer to source of liquid.
Pump will not start.	No fuel.	Allow engine to cool for 2 minutes, then fill fuel tank.
	Faulty spark plug.	Replace spark plug.
	Fuel valve lever is in the OFF position.	Turn the fuel valve lever to the ON position.
	Ignition switch is in the OFF position.	Turn the ignition switch to the ON position.
Pump starts, but runs roughly.	Choke is in the wrong position.	Slide choke lever to the RUN position.
	Choke is in the wrong position.	Slide choke lever to the RUN position.
	Spark plug wire is loose.	Attach wire to spark plug secure.
	Faulty spark plug.	Replace spark plug.
	Fuel is contaminated (water, debris, etc.).	Allow engine to cool for 2 minutes, then drain fuel tank and carburetor. Fill tank with fresh fuel.
Pump shuts down during operation.	No fuel.	Allow engine to cool for 2 minutes, then fill fuel tank.

\*1. Pump fails to prime or primes slowly:

- Size and length of pipe.
- Pipe fitting.
- Elevation above sea level.

Including all of the above, we recommend that the total suction head not exceed 25 ft.

\*2. An excessively worn impeller is mainly caused by a number of situations, such as:

- Restricted suction.
- Excessive suction lift.

\*3. The seal may be damaged due to:

- Normal wear.
- Overheating.
- Pumping chemicals that this seal is not designed for

Contact an authorized service depot for further assistance.



# TROUBLESHOOTING GUIDE

## RLCGF – END SUCTION CENTRIFUGAL PUMPS

Trouble	Possible Cause	Corrective Action
Pump will not pump.	Air leak in suction line.	Make sure suction hose is double clamped at joints, clamps are tight, fittings have thread compound and are tight, with no nicks or cuts in hose.
	The suction and/or discharge line(s) may be blocked, or the valve(s) are closed, faulty and/or blocked.	Check to see that the lines and valves are in good working order.
	The end of the suction line is not submerged.	Increase its length, or move pump closer to source of liquid.
	Total head is greater than what pump can handle.	Reduce total head or use a higher head pump.
Pump will not prime.	Excessive suction lift (*1)	Move the pump closer to liquid source.
	No foot valve is being used.	Add a foot valve to the suction line.
	Engine speed is too low.	Increase RPM
Priming takes a long time.	Suction line is quite long.	See priming instructions in owner's manual.
	Air pockets or leaks in the suction line.	Check the line for loose connections.
	No foot valve is being used.	Add a foot valve to the suction line.
Pump does not perform as well as it should.	Flow is restricted due to: a. Debris build-up. b. Faulty or semi-open valve(s). c. Pipe or hose used is smaller than the thread sizes on the pump.	a. Clean the lines and fittings. b. Check to see that the valves are in good working order. c. Increase the size of hose or pipe to reduce friction losses.
	Insufficient submergence of the end of the suction line.	Add lengths of suction pipe to keep submerged end well below the water surface, or move the pump closer to source of liquid.
	Excessively worn impeller (*2).	Replace impeller.
	Seal is damaged (*3). Liquid will be leaking through the middle of the adapter.	Replace the seal.
	Air pockets or leaks in the suction line.	Check the line for loose connections.
	Clogged impeller.	Remove casing to clean out.
	Engine throttle is in SLOW position.	Move throttle to FAST position.
Pump loses prime.	Water level drops while pumping, uncovering suction piping.	Check water supply. Add length of pipe to suction to keep submerged end under water, or move the pump closer to source of liquid.
	Foot valve is leaking – not holding water in the suction line.	Replace foot valve.
Pump will not start.	No fuel.	Allow engine to cool for 2 minutes, then fill fuel tank.
	Faulty spark plug.	Replace spark plug.
	Fuel valve lever is in the OFF position.	Turn the fuel valve lever to the ON position.
	Ignition switch is in the OFF position.	Turn the ignition switch to the ON position.
	Choke is in the wrong position.	Slide choke lever to the RUN position.
Pump starts, but runs roughly.	Choke is in the wrong position.	Slide choke lever to the RUN position.
	Spark plug wire is loose.	Attach wire to spark plug, secure.
	Faulty spark plug.	Replace spark plug.
	Fuel is contaminated (water, debris, etc.).	Allow engine to cool for 2 minutes, then drain fuel tank and carburetor. Fill tank with fresh fuel.
Pump shuts down during operation.	No fuel.	Allow engine to cool for 2 minutes, then fill fuel tank.

# GLOSSARY OF TERMS

**Air volume control**

Designed to maintain the air charge in a standard water storage tank. Pre-charged tanks do not require an air volume control.

**Atmospheric pressure**

A force exerted upon the earth's surface by the weight of air extending to a height of 25 miles above the earth. At sea level 14.7 pounds per square inch.

**Barb fitting**

A part of a fitting that a hose slides over which contains ridges, which help lock the hose to the fitting. The hose is then secured with a clamp.

**Basin (sewage)**

A container connected to a sink, toilet, washer or dishwasher that is used to collect refuse that comes from these appliances. Once collected, the waste is pumped from the basin to a pipe or septic tank.

**Black water**

Also known as sewage or wastewater. Water containing solids up to 2 inches in diameter.

**Centrifugal force**

The force created by a spinning or rotating impeller resulting in the movement of water outward from the center point. A pump uses an impeller to create centrifugal force.

**Check valve**

Allows water to move in only one direction which prevents water from returning to its source.

**Control box**

Installs above ground. Contains electrical starting components for 3-wire submersible deep well pumps. 2-wire submersible deep well pumps do not use a control box.

**Convertible jet pump**

For both deep wells (where pumping water levels are as far as 90 feet below the pump) and shallow wells (where pumping water levels are no more than 25 feet below the pump). Pump/tank packages are also available.

**Cut-in pressure setting**

The point at which the pressure switch turns the pump on.

**Deep well**

Well with a depth to water greater than 25 feet.

**Deep well pump (submersible)**

For use on wells where pump water levels are up to 400 feet below point of use. Pump is submerged underwater in the well.

**Depth to water**

The vertical measurement from pump level down to water level of water source. Pump height above water.

**Discharge**

The opening by which water is removed by the pump.

**Discharge pressure**

The amount of force or pressure of the water being discharged from the pump.

**Dual voltage motor**

Pump motor can then be operated on 115 Volts or 230 Volts.

**Effluent**

Water containing solids up to 1/2" in diameter generated from activities such as dishwashing, bathing, laundry, etc.) Also known as gray water.

**FNPT**

Female National Pipe Thread – a U.S. standard for tapered threads used on threaded pipes and fittings. (The female end is larger than the male end).

**Foot valve**

Installs on the end of the pump suction pipe to prevent water from draining back to source. Includes strainer to minimize suction of debris into the pump.

# GLOSSARY OF TERMS

**Friction loss**

A loss in pressure caused by friction when liquid moves through a pipe.

**GHT**

Garden Hose Thread (3/4").

**GPH**

Gallons per hour.

**GPM**

Gallons per minute.

**Gray water**

Also known as effluent. Water containing solids up to 1/2" in diameter generated from activities such as dishwashing, bathing, laundry, etc.

**Head**

The vertical distance from:

the top of the well to the pressure tank

+ the top of the well to the static water level

+ the drawdown (static water level to the pumping water level)

+ the vertical distance from the well to the house

**HP**

Horsepower (power of motor)

**Intake**

The opening by which water is sucked into the pump.

**Jet Pump**

A centrifugal pump which requires a jet to help build additional water pressure.

**MNPT**

Male National Pipe Thread – a U.S. standard for tapered threads used on threaded pipes and fittings. (The male end is smaller than the female end).

**Multi-stage jet pump**

For use on deep wells only with pumping water levels as far as 210 feet below the pump.

**NPT**

National Pipe Thread – a U.S. standard for tapered threads used on threaded pipes and fittings.

**PSI**

Pounds per square inch. A volumetric pressure measurement.

**Pre-charged tank**

A water storage tank pre-charged with air at the factory featuring a vinyl bag to separate water from the air which prevents waterlogging.

This tank design provides greater drawdown than standard tanks. Pre-charged tanks do not require an air volume control.

**Pressure**

A force usually expressed in pounds per square inch.

**Pressure switch**

The switch that automatically turns the pump on and off at specified pressures of 30/50 psi and 40/60 psi.

**IMPORTANT:** always replace an old switch with a new switch with the same pressure settings.

**Pressure operation - 30/50**

Pressure switch turns pump on at 30 psi and off at 50 psi.

**Pressure operation - 40/60**

Pressure switch turns pump on at 40 psi and off at 60 psi.

**Priming the pump**

The initial filling of a jet or centrifugal pump with water so that air can be removed.

# GLOSSARY OF TERMS

**Pump capacity**

The amount of water a pump is capable of moving at a given pressure.

**Pumping water level**

The distance below ground where the water is found when the well is being pumped at its rated capacity.

Static Water Level + Drawdown = Pumping Water Level.

**Safety relief valve**

Required for all submersible pump and pressure boosting installations to prevent over-pressurization of water storage tank and system piping that could develop from pressure switch malfunction.

**Sewage**

Water containing solids up to 2" in diameter. Also known as black water.

**Sewage basin**

A container connected to a sink, toilet, washer or dishwasher that is used to collect refuse that comes from these appliances. Once collected, the waste is pumped from the basin to a pipe or septic tank.

**Shallow well**

Well with a depth of water of 25' or less.

**Shallow well pump**

For use in wells where pump water levels are no more than 25' below the pump. Features a built-in jet.

**Sizing**

Properly matching product to application for best performance.

**Standard tank**

A pressurized water storage tank where air comes in contact with water. Requires air volume control for proper operation.

**Static water level**

The distance below ground where water is found when no pumping occurs.

**Submersible deep well pump**

For use on wells where pump water levels are up to 400 feet below point of use. Pump is submerged underwater in the well.

**Suction lift**

The vertical height from the pumping water level to the suction part of the pump.

**Tank**

Stores air and water under pressure to provide for automatic pump operation and a source of water when pump is not running.

**TEFC design**

Totally enclosed, fan cooled design.

**Waterlogging**

The absorption of air into water stored in a water storage tank which greatly reduces the amount of usable water drawdown available from the tank.

**Water storage tank**

Stores air and water under pressure to provide for automatic pump operation and a source of water when pump is not running.

**Well capacity**

Also known as the well's replenishment rate or well recovery rate. It is the rate at which the well refills with water – measured in gpm. This information is found on the Well Driller's Report.

**Well recovery rate**

Also known as the well's replenishment rate or well capacity. It is the rate at which the well refills with water – measured in gpm. This information is found on the Well Driller's Report.

**Well replenishment rate**

Also known as the well's recovery rate or well capacity. It is the rate at which the well refills with water – measured in gpm. This information is found on the Well Driller's Report.



# TECHNICAL DATA

## FRICITION LOSS CHART

Nom. Pipe Size	3/4"			1"			1-1/4"			1-1/2"			2"		
Material	Steel	Copper	Plastic	Steel	Copper	Plastic	Steel	Copper	Plastic	Steel	Copper	Plastic	Steel	Copper	Plastic
I. D. / US GPM	0.824	0.822	0.824	1.049	1.062	1.049	1.38	1.368	1.38	1.61	1.6	1.61	2.067	2.062	2.067
1															
2	1.93	1.21	1.04	0.6	0.35	0.32									
2.5	2.91	1.82	1.57	0.92	0.55	0.48									
3	4.08	2.56	2.21	1.26	0.73	0.68									
3.5	5.42	3.4	2.93	1.7	1	0.9									
4	6.94	4.36	3.74	2.14	1.24	1.15	0.56	0.36	0.3	0.27	0.17	0.14			
4.5	8.63	5.4	4.66	2.68	1.58	1.45	0.69	0.42	0.39	0.34	0.21	0.18			
5	10.5	6.57	5.66	3.42	1.88	1.75	0.85	0.55	0.46	0.41	0.25	0.22			
5.5	12.4	7.79	6.75	3.9	2.3	2.1	1	0.62	0.53	0.49	0.3	0.26			
6	14.7	9.22	7.95	4.54	2.63	2.45	1.2	0.77	0.65	0.57	0.36	0.31			
6.5	17	10.7	9.25	5.3	3.12	2.84	1.38	0.88	0.72	0.66	0.42	0.36			
7	19.6	12.2	10.6	6.08	3.58	3.25	1.59	1.02	0.86	0.76	0.48	0.41			
7.5	22.3	13.9	12	6.92	4.03	3.68	1.82	1.16	0.98	0.86	0.54	0.46			
8	25	15.7	13.5	7.73	4.5	4.16	2.04	1.31	1.1	0.96	0.61	0.52			
8.5	27.9	17.6	15.1	8.76	5.08	4.62	2.3	1.47	1.21	1.07	0.68	0.58			
9	31.1	19.5	16.8	9.72	5.6	5.17	2.55	1.62	1.35	1.19	0.75	0.65			
9.5	34.5	21.6	18.6	10.7	6.18	5.72	2.82	1.79	1.5	1.32	0.83	0.72			
10	37.8	23.7	20.4	11.7	6.77	6.31	3.08	1.98	1.67	1.45	0.92	0.79	0.43	0.27	0.23
11	45.1	28.2	24.4	14.1	8.08	7.58	3.7	2.32	1.98	1.74	1.1	0.95	0.51	0.32	0.27
12	53	33.2	28.6	16.4	9.47	8.85	4.31	2.75	2.33	2.04	1.29	1.1	0.6	0.37	0.32
13	61.5	38.5	33.2	18.9	11	10.3	5.01	3.18	2.71	2.37	1.49	1.28	0.7	0.43	0.37
14	70.5	44.2	38	21.8	12.6	11.8	5.73	3.64	3.1	2.71	1.71	1.46	0.8	0.49	0.43
16	90.2	56.6	48.6	27.9	16.2	15.1	7.34	4.68	3.96	3.47	2.2	1.87	1.03	0.63	0.55
18	112	70.4	60.5	34.7	20.1	18.7	9.13	5.81	4.93	4.31	2.75	2.33	1.28	0.78	0.69
20	136	83.5	73.5	42.1	24.4	22.8	11.1	7.1	6	5.24	3.31	2.83	1.55	0.96	0.84
25				63.9	36.9	34.6	16.8	10.7	9.06	7.9	5	4.26	2.35	1.45	1.27
30				89.2	51.6	48.1	23.5	15	12.7	11.1	7	6	3.29	2.03	1.78
35				119	68.7	64.3	31.2	20	16.9	14.7	9.35	7.94	4.37	2.71	2.36
40				152	88	82	40	25.6	21.6	18.9	12	10.2	5.6	3.47	3.03
45				189	109	102	49.4	31.9	27	23.4	14.9	12.6	6.96	4.31	3.76
50							60.4	38.7	32.6	28.5	18.1	15.4	8.46	5.24	4.57
55							71.9	46.5	39.1	34	21.5	18.4	10.1	6.22	5.46
60							84.7	54.1	45.6	40	25.3	21.6	11.9	7.34	6.44
65							99.1	63	53.4	46.4	29	25.1	13.8	8.5	7.42
70							114	72.2	61.5	53.2	33.8	28.7	15.8	9.78	8.53
75							129	82.1	69.4	60.4	38	32.6	17.9	11.1	9.68
80							144	92.4	77.9	68.1	43.1	36.8	20.2	12.5	10.9
85							161	104	87	76.2	47.6	41.2	22.5	14	12.2
90							179	115	96.6	84.7	53.6	45.7	25.1	15.6	13.6
95										93.6	58.8	50.5	27.8	17.2	15

Loss of head in feet due to friction per 100 feet of pipe.  
(Based on C = 100 for steel, C = 130 for copper, and C = 140 for plastic)

## CABLE SELECTON GUIDE FOR DEEP WELL SUBMERSIBLES

### Canadian

Cable selection based on a 3% voltage drop,  
two- or three-wire cable, 60 Hz.

Motor		(AWG) Copper Wire Size		
HP	Volts	14	12	10
1/2	115	60	95	150
	230	240	390	610
3/4	230	180	285	455
1	230	150	240	375
1-1/2	230	115	185	285

### U.S.A.

Cable selection based on a 5% voltage drop,  
two- or three-wire cable, 60 Hz.

Motor		(AWG) Copper Wire Size		
HP	Volts	14	12	10
1/2	115	100	160	250
	230	400	650	1020
3/4	230	300	480	760
1	230	250	400	630
1-1/2	230	190	310	480

# INDEX OF ITEMS NUMERICALLY BY ITEM NUMBER

All accessories are listed on page 63.

Item Number	Model	Description	Page Number
14942003	MPDP	Drill powered transfer pump	51
14942004	MPFV12	12 V DC, 300 gph Multi-purpose transfer pump	48
14942005	MPFVK115	115 V, 356 gph Multi-purpose transfer pump	48
14942006	MPTC	1250 gph Multi-purpose transfer pump	49
14942050	SP33PED	1/3 hp, 3300 gph Thermoplastic pedestal sump pump	29
14942051	SC33PED	1/3 hp, 3500 gph Cast iron pedestal sump pump	29
14942401	RL12G05-2W1V	1/2 hp, 12 gpm, 2-wire, 115 V, 4" Deep well submersible pump	12
14942402	RL12G05-2W2V	1/2 hp, 12 gpm, 2-wire 230 V, 4" Deep well submersible pump	12
14942403	RL12G07-2W2V	3/4 hp, 12 gpm, 2-wire, 230 V, 4" Deep well submersible pump	12
14942404	RL12G10-2W2V	1 hp, 12 gpm, 2-wire, 230 V, 4" Deep well submersible pump	12
14942405	RL12G05-3W2V	1/2 hp, 12 gpm, 3-wire, 230 V, 4" Deep well submersible pump	12
14942406	RL12G07-3W2V	3/4 hp, 12 gpm, 3-wire, 230 V, 4" Deep well submersible pump	12
14942407	RL12G10-3W2V	1 hp, 12 gpm, 3-wire, 230 V, 4" Deep well submersible pump	12
14942408	RL12G15-3W2V	1.5 hp, 12 gpm, 3-wire, 230 V, 4" Deep well submersible pump	12
14942409	RL22G10-3W2V	1.0 hp, 22 gpm, 3-wire, 230 V, 4" Deep well submersible pump	12
14942410	RL12G05-2W2V-SP	1/2 hp, 12 gpm, 2-wire 230 V, Deep well sub pak (US order no.)	12
14942411	RL12G07-2W2V-SP	3/4 hp, 12 gpm, 2-wire 230 V, Deep well sub pak (US order no.)	12
14942412	RL12G05-2W1V-SP	1/2 hp 12 gpm, 2-wire 115 V, Deep well sub pak (CAN order number)	12
14942413	RL12G05-2W2V-SP	1/2 hp, 12 gpm, 2-wire 230 V, Deep well sub pak (CAN order number)	12
14942414	RL12G07-2W2V-SP	3/4 hp, 12 gpm, 2-wire 230 V, Deep well sub pak (CAN order number)	12
14942600	C15	68 gph Condensate removal pump - 15' lift	51
14942601	C20ST	82 gph Condensate removal pump kit - 20' lift, w/ tubing	51
14942635	RL75WAM	3/4 hp, 10500 gph Premium cast iron sewage pump	39
14942721	RL-MP50	1/2 hp, 3000 gph Thermoplastic utility pump	44
14942722	RL50CON	1/2 hp, 60 gpm Heavy duty submersible utility pump	47
14942731	RL-MP16	1/6 hp, 1300 gph Thermoplastic utility pump	44
14942732	RL-MP25	1/4 hp, 2200 gph Thermoplastic utility pump	44
14942734	RL-250U	1/4 hp, 1500 gph Aluminum utility pump	45
14942735	RL-MP25A	1/4 hp, 2200 gph Automatic utility pump	46
14942736	RL-SPS33	1/3 hp, 3200 gph under sink sump package w/ 6 gal. basin	30
14942739	RL-SP25T	1/4 hp, 2900 gph Thermoplastic sump pump w/ tethered float switch	24
14942740	RL-SP33T	1/3 hp, 3200 gph Thermoplastic sump pump w/ tethered float switch	24
14942741	RL-SP33V	1/3 hp, 3200 gph Thermoplastic sump pump w/ vertical float switch	24
14942742	RL-SP50T	1/2 hp, 3600 gph Thermoplastic sump pump w/ tethered float switch	24
14942743	RL-SP50V	1/2 hp, 3600 gph Thermoplastic sump pump - w/ vertical float switch	24
14942744	RL-SC33T	1/3 hp, 3350 gph Cast iron sump pump w/ tethered float switch - 1/2" solids	25 & 35
14942745	RL-SC33V	1/3 hp, 3350 gph Cast iron sump pump w/ vertical float switch - 1/2" solids	25
14942746	RL-SC50T	1/2 hp, 4300 gph Cast iron sump pump w/ tethered float switch - 1/2" solids	25 & 35
14942747	RL-SC50V	1/2 hp, 4300 gph Cast iron sump pump w/ vertical float switch - 1/2" solids	25
14942748	RL-WC50TA	1/2 hp, 5600 gph Cast iron sewage pump w/ tethered switch	38
14942749	RL-WCS50TA	1/2 hp, 5600 gph Cast iron sewage pump w/ tethered switch includes basin	41
14942770	RL-DUPKIT	Pre-assembled duplex piping and check valve kit	27
14942771	RL-SC33DUP	1/3 hp, Dual cast iron sump pump system	26
14942780	RL-SS50V	1/2 hp Premium stainless steel sump pump	28
14942781	RL-SS50T	1/2 hp, 3450 gph, Premium stainless steel sump pump with tethered float switch	28 & 36
14942782	RL-SS100T	1 hp, 5300 gph, Premium stainless steel sump pump with tethered float switch	28 & 36
14942790	RL-SPBS	Backup sump system	31
602006	RJS-50	1/2 hp Shallow well jet pump	6
602007	RJS-75	3/4 hp Shallow well jet pump	6
602008	RJS-100	1 hp Shallow well jet pump	6
602014	RJS-50/RL14H	1/2 hp, 14.0 Gal. Shallow well jet pump & tank system	11
602036	RJC-50	1/2 hp Convertible jet pump	9

# INDEX OF ITEMS NUMERICALLY BY ITEM NUMBER

All accessories are listed on page 63.

Item Number	Model	Description	Page Number
602037	RJC-75	3/4 hp Convertible jet pump	9
602038	RJC-100	1 hp Convertible jet pump	9
602063	RJC-50/RL14H	1/2 hp, 14.0 Gal. Convertible jet pump & tank system	11
602099	RJS-50/RL6H	1/2 hp, 5.3 Gal. Shallow well jet pump & tank system	11
602102	RJC-50/RL6H	1/2 hp, 5.3 Gal. Convertible jet pump & tank system	11
602234	RJS-50E	1/2 hp Shallow well jet pump	7
602236	RJS-50E/RL6H	1/2 hp, 5.3 gal. Shallow well jet pump & tank system	11
602238	RJS-75E	3/4 hp Shallow well jet pump	7
602239	RJS-75SS	3/4 hp Stainless steel shallow well jet pump	8
604449	RL33	33.0 gal. Vertical pre-charged pressure tank	10
604452	RL2	2.10 gal. Inline pre-charged pressure tank	10
604453	RL4	4.5 gal Inline pre-charged pressure tank	10
604454	RL8	8.5 gal Inline pre-charged pressure tank	10
604456	RL14	14.0 gal Vertical pre-charged pressure tank	10
604457	RL20	20.0 gal Vertical pre-charged pressure tank	10
604459	RL44	44.0 gal Vertical pre-charged pressure tank	10
604493	RL14H	14.0 gal Horizontal pre-charged pressure tank	10
604529	RL6H	5.3 gal Horizontal pre-charged pressure tank	10
604531	RL119	119.0 gal Vertical pre-charged pressure tank	10
604541	RL81	81.0 gal Vertical pre-charged pressure tank	10
614430	RJSE-50	1/2 hp, 115 V Cast iron sprinkler utility pump	18
614432	RJSE-75SS	3/4 hp, 115 V Stainless steel sprinkler utility pump	19
614481	RLHE-300	3 hp Cast iron industrial sprinkler pump	21
614670	RLSP-75	3/4 hp Self-priming sprinkler pump	20
614671	RLSP-100	1 hp Self-priming sprinkler pump	20
614672	RLSP-150	1.5 hp Self-priming sprinkler pump	20
614673	RLSP-200	2.0 hp Self-priming sprinkler pump	20
614675	RLSP-150-BI	1.5 hp Self-priming sprinkler pump, brass impeller	20
614676	RLSP-200-BI	2.0 hp Self-priming sprinkler pump, brass impeller	20
615093	RLCGF-5	205cc B & S 900 series, Cast iron centrifugal pressure pump	58
617032	5RLGF-8KRF	196cc OHV Engine driven, 2" Cast iron transfer pump	57
617033	5RLAG-2L	179cc OHV Engine drive, 2" Aluminum water transfer pump	56
617034	6RLAG-2LST	208cc OHV Engine driven, Aluminum semi-trash pump, 2" NPT	61
617038	6RLAG-3LTT	208cc OHV Engine driven, Aluminum trash pump, 3" NPT	62
617049	2RLAG-1	79cc OHV Engine driven, 1.5" Aluminum water transfer pump	54
617053	4RLAG-2H	118cc Honda engine driven, 2" Aluminum water transfer pump	55
617054	6RLAG-3ST	208cc OHV Engine driven, Aluminum semi-trash pump, 3" NPT	61
617070	6RLPG-2U	212cc OHV Engine driven, Thermoplastic ag chemical & transfer pump, 2" x 2" FNPT	59
617071	6RLPG-2K	196cc Kohler Courage engine driven, Thermoplastic ag chemical & transfer pump, 2" x 2" FNPT	60
620040	RL31EA	1/3 hp, 6300 gph Heavy-duty cast iron effluent pump w/ tethered float switch	37
620043	RL52SA	1/2 hp, 8100 gph Cast iron sewage pump w/ tethered switch	40
620051	RL52WAM	1/2 hp, 9000 gph Cast iron sewage pump w/ tethered switch	39
620061	RL52WSPX	1/2 hp, 9000 gph Cast iron sewage pump w/ tethered switch includes basin	41
620109	RL-160U	1/6 hp, 1300 gph Aluminum utility pump	45
621804	RL-50	1/2 hp, 2700 gph Self-priming multi-purpose transfer pump	50
621810	RL-S50	1/2 hp, 2700 gph Cast iron surface effluent pump	34
621826	RL-S75	3/4 hp, 3480 gph Cast iron surface effluent pump	34
640188	RLCB05-115	Control box, 1/2 hp, 115 V	13
640189	RLCB05-230	Control box, 1/2 hp, 230 V	13
640190	RLCB07-230	Control box, 3/4 hp, 230 V	13
640191	RLCB10-230	Control box, 1 hp, 230 V	13
640222	RLCB15-230	Control box, 1.5 hp, 230 V	13

# INDEX OF ITEMS ALPHABETICALLY BY MODEL

All accessories are listed on page 63.

Model	Item Number	Description	Page Number
2RLAG-1	617049	79cc OHV Engine driven, 1.5" Aluminum water transfer pump	54
4RLAG-2H	617053	118cc Honda engine driven, 2" Aluminum water transfer pump	55
5RLAG-2L	617033	179cc OHV Engine drive, 2" Aluminum water transfer pump	56
5RLGF-8KRF	617032	196cc OHV Engine driven, 2" Cast iron transfer pump	57
6RLAG-2LST	617034	208cc OHV Engine driven, Aluminum semi-trash pump, 2" NPT	61
6RLAG-3LTT	617038	208cc OHV Engine driven, Aluminum trash pump, 3" NPT	62
6RLAG-3ST	617054	208cc OHV Engine driven, aluminum semi-trash pump, 3" NPT	61
6RLPG-2K	617071	196cc Kohler Courage engine driven, Thermoplastic ag chemical & transfer pump, 2" x 2" FNPT	60
6RLPG-2U	617070	212cc OHV Engine driven, Thermoplastic ag chemical & transfer pump, 2" x 2" FNPT	59
C15	14942600	68 gph Condensate removal pump - 15' lift	51
C20ST	14942601	82 gph Condensate removal pump kit - 20' lift, w/ tubing	51
MPDP	14942003	Drill powered transfer pump	51
MPFV12	14942004	12 V DC, 300 gph multi-purpose transfer pump	48
MPFVK115	14942005	115 V, 356 gph Multi-purpose transfer pump	48
MPTC	14942006	1250 gph - Multi-purpose transfer pump	49
RJC-100	602038	1 hp convertible jet pump	9
RJC-50	602036	1/2 hp convertible jet pump	9
RJC-50/RL14H	602063	1/2 hp, 14.0 gal. Convertible jet pump & tank system	11
RJC-50/RL6H	602102	1/2 hp, 5.3 gal. Convertible jet pump & tank system	11
RJC-75	602037	3/4 hp convertible jet pump	9
RJS-100	602008	1 hp shallow well jet pump	6
RJS-50	602006	1/2 hp shallow well jet pump	6
RJS-50/RL14H	602014	1/2 hp, 14.0 gal. Shallow well jet pump & tank system	11
RJS-50/RL6H	602099	1/2 hp, 5.3 gal. Shallow well jet pump & tank system	11
RJS-50E	602234	1/2 hp Shallow well jet pump	7
RJS-50E/RL6H	602236	1/2 hp, 5.3 gal. Shallow well jet pump & tank system	11
RJS-75	602007	3/4 hp Shallow well jet pump	6
RJS-75E	602238	3/4 hp Shallow well jet pump	7
RJS-75SS	602239	3/4 hp Stainless steel sprinkler utility pump	8
RJSE-50	614430	1/2 hp, 115 V Cast iron sprinkler utility pump	18
RJSE-75SS	614432	3/4 hp, 115 V Stainless steel sprinkler utility pump	19
RL-160U	620109	1/6 hp, 1300 gph Aluminum utility pump	45
RL-250U	14942734	1/4 hp, 1500 gph Aluminum utility pump	45
RL-50	621804	1/2 hp, 2700 gph Self-priming multi-purpose transfer pump	50
RL-DUPKIT	14942770	Pre-assembled duplex piping and check valve kit	27
RL-MP16	14942731	1/6 hp, 1300 gph Thermoplastic utility pump	44
RL-MP25	14942732	1/4 hp, 2200 gph Thermoplastic utility pump	44
RL-MP50	14942721	1/2 hp, 3000 gph Thermoplastic utility pump	44
RL-MP25A	14942735	1/4 hp, 2200 gph Automatic utility pump	46
RL-S50	621810	1/2 hp, 2700 gph Cast Iron surface effluent pump	34
RL-S75	621826	3/4 hp, 3480 gph Cast Iron surface effluent pump	34
RL-SC33DUP	14942771	1/3 hp, Dual cast iron sump pump system	26
RL-SC33T	14942744	1/3 hp, 3350 gph Cast iron sump pump w/ tethered float switch - 1/2" solids	25 & 35
RL-SC33V	14942745	1/3 hp, 3350 gph Cast iron sump pump w/ vertical float switch - 1/2" solids	25
RL-SC50T	14942746	1/2 hp, 4300 gph Cast iron sump pump w/ tethered float switch - 1/2" solids	25 & 35
RL-SC50V	14942747	1/2 hp, 4300 gph Cast iron sump pump w/ vertical float switch - 1/2" solids	25
RL-SP25T	14942739	1/4 hp, 2900 gph Thermoplastic sump pump w/ tethered float switch	24
RL-SP33T	14942740	1/3 hp, 3200 gph Thermoplastic sump pump w/ tethered float switch	24
RL-SP33V	14942741	1/3 hp, 3200 gph Thermoplastic sump pump w/ vertical float switch	24
RL-SP50T	14942742	1/2 hp, 3600 gph Thermoplastic sump pump w/ tethered float switch	24
RL-SP50V	14942743	1/2 hp, 3600 gph Thermoplastic sump pump - w/ vertical float switch	24
RL-SPBS	14942790	Backup sump system	31
RL-SPS33	14942736	1/3 hp, 3200 gph Under sink sump package w/ 6 gal. basin	30



# INDEX OF ITEMS ALPHABETICALLY BY MODEL

All accessories are listed on page 63.

Model	Item Number	Description	Page Number
RL-SS100T	14942782	1 hp, 5300 gph, Premium stainless steel sump pump with tethered float switch	28 & 36
RL-SS50T	14942781	1/2 hp, 3450 gph, Premium stainless steel sump pump with tethered float switch	28 & 36
RL-SS50V	14942780	1/2 hp Premium stainless steel sump pump	28
RL-WC50TA	14942748	1/2 hp, 5600 gph Cast iron sewage pump w/ tethered switch	38
RL-WCS50TA	14942749	1/2 hp, 5600 gph Cast iron sewage pump w/ tethered switch includes basin	41
RL119	604531	119.0 gal Vertical pre-charged pressure tank	10
RL12G05-2W1V	14942401	1/2 hp, 12 gpm, 2-wire, 115 V, 4" Deep well submersible pump	12
RL12G05-2W1V-SP	14942412	1/2 hp, 12 gpm, 2-wire 115 V, Deep well sub pak (CAN order number)	12
RL12G05-2W2V	14942402	1/2 hp, 12 gpm, 2-wire 230 V, 4" Deep well submersible pump	12
RL12G05-2W2V-SP	14942410	1/2 hp, 12 gpm, 2-wire 230 V, Deep well sub pak (US order no.)	12
RL12G05-2W2V-SP	14942413	1/2 hp, 12 gpm, 2-wire 230 V, Deep well sub pak (CAN order number)	12
RL12G05-3W2V	14942405	1/2 hp, 12 gpm, 3-wire, 230 V, 4" Deep well submersible pump	12
RL12G07-2W2V	14942403	3/4 hp, 12 gpm, 2-wire, 230 V, 4" Deep well submersible pump	12
RL12G07-2W2V-SP	14942411	3/4 hp, 12 gpm, 2-wire 230 V, Deep well sub pak (US order no.)	12
RL12G07-2W2V-SP	14942414	3/4 hp, 12 gpm, 2-wire 230 V, Deep well sub pak (CAN order number)	12
RL12G07-3W2V	14942406	3/4 hp, 12 gpm, 3-wire, 230 V, 4" Deep well submersible pump	12
RL12G10-2W2V	14942404	1 hp, 12 gpm, 2-wire, 230 V, 4" Deep well submersible pump	12
RL12G10-3W2V	14942407	1 hp, 12 gpm, 3-wire, 230 V, 4" Deep well submersible pump	12
RL12G15-3W2V	14942408	1.5 hp, 12 gpm, 3-wire, 230 V, 4" Deep well submersible pump	12
RL14	604456	14.0 gal Vertical pre-charged pressure tank	10
RL14H	604493	14.0 gal Horizontal pre-charged pressure tank	10
RL2	604452	2.10 gal Inline pre-charged pressure tank	10
RL20	604457	20.0 gal Vertical pre-charged pressure tank	10
RL22G10-3W2V	14942409	1.0 hp, 22 gpm, 3-wire, 230 V, 4" Deep well submersible pump	12
RL31EA	620040	1/3 hp, 6300 gph Heavy-duty cast iron effluent pump	37
RL33	604449	33.0 gal Vertical pre-charged pressure tank	10
RL4	604453	4.5 gal Inline pre-charged pressure tank	10
RL44	604459	44.0 gal Vertical pre-charged pressure tank	10
RL50CON	14942722	1/2 hp, 60 gpm Heavy duty submersible utility pump	47
RL52SA	620043	1/2 hp, 8100 gph Cast iron sewage pump w/ tethered switch	40
RL52WAM	620051	1/2 hp, 9000 gph Cast iron sewage pump w/ tethered switch	39
RL52WSPX	620061	1/2 hp, 9000 gph Cast iron sewage pump w/ tethered switch includes basin	41
RL6H	604529	5.3 gal Horizontal pre-charged pressure tank	10
RL75WAM	14942635	3/4 hp, 10500 gph Premium cast iron sewage pump	39
RL8	604454	8.5 gal Inline pre-charged pressure tank	10
RL81	604541	81.0 gal Vertical pre-charged pressure tank	10
RLCB05-115	640188	Control box, 1/2 hp, 115 V	13
RLCB05-230	640189	Control box, 1/2 hp, 230 V	13
RLCB07-230	640190	Control box, 3/4 hp, 230 V	13
RLCB10-230	640191	Control box, 1 hp, 230 V	13
RLCB15-230	640222	Control box, 1.5 hp, 230 V	13
RLCGF-5	615093	205cc B & S 900 series, Cast iron centrifugal pressure pump	58
RLHE-300	614481	3 hp Cast iron industrial sprinkler pump	21
RLSP-100	614671	1 hp Self-priming sprinkler pump	20
RLSP-150	614672	1.5 hp Self-priming sprinkler pump	20
RLSP-150-BI	614675	1.5 hp Self-priming sprinkler pump, brass impeller	20
RLSP-200	614673	2.0 hp Self-priming sprinkler pump	20
RLSP-200-BI	614676	2.0 hp Self-priming sprinkler pump, brass impeller	20
RLSP-75	614670	3/4 hp Self-priming sprinkler pump	20
SC33PED	14942051	1/3 hp, 3500 gph Cast iron pedestal sump pump	29
SP33PED	14942050	1/3 hp, 3300 gph Thermoplastic pedestal sump pump	29



**RedLionProducts.com**

**US Address:**

301 N. MacArthur Blvd.  
Oklahoma City, OK  
73127-6616  
U.S.A.

**Canada Address:**

Suite 101 - 310 De Baets Street  
Winnipeg, MB  
R2J 0H4  
Canada