





# **Professionals Training Professionals**







The Center For Excellence training facility at Zoeller Company in Louisville, Kentucky offers a unique opportunity to experience the pump industry, learning from experts in the field. Bring your customers for an hour, a day, or more. Learn about the pump industry and why Zoeller products are designed to be the best for professionals.

#### What We Do

Gain first-hand experience in the unique and varied aspects of pump manufacturing and specification at our 6,000 ft<sup>2</sup> training facility. In the demonstration room, our industry professionals offer live demonstrations and computer simulations of our latest products and core concepts. Lift stations including active controls are designed to demonstrate the how-and-why of pump technology. A state-of-the-art classroom provides space for lectures and group discussions with a library of cutaway models for reference.

#### **Training Tailored To Meet Your Needs**

Training experiences at the CFE are tailored to cover the specific topics that most interest you and your customers. All participants gain valuable technical and practical product knowledge. Our training staff will work with you to design the most profitable experience for your group.

Some topics we have covered to date include:

Pump sizing

Troubleshooting a control panel

Product overview

Startup training

How performance curves are created

Rail systems



Email us! cfetraining@zoeller.com







## **Zoeller University Online**

#### **ONLINE COURSES FOR PLUMBING PROFESSIONALS**

Learn at your pace in your space with zoeller university's online platform! Zoeller offers online, interactive courses for industry professionals. Grow your expertise in subjects covering products, technical knowledge, policy, promotions, and more, all from the comfort of your own home or office! Create a profile and start learning today when you visit <a href="https://www.zoelleruniversity.com">www.zoelleruniversity.com</a>.



## **Zoeller University On Demand**

#### **LIVE & RECORDED WEBINARS**

Zoeller hosts several FREE LIVE webinars each year that cover a variety of industry and product-related topics from pump and basin sizing basics to control panel components and troubleshooting. Topics are chosen based on your feedback and fine-tuned by Zoeller experts with years of experience and industry knowledge to create a valuable and educational experience for all attendees.



## **Zoeller University On The Road**

#### **SALES TRAINING THAT TRAVELS!**

Zoeller is taking it to the road with their product trailer. Do you have a special event, show or counter day coming up? Contact your local Zoeller Representative to book a visit from our product experts and the mobile product demo trailer.

Equipped with interactive demos, and the latest Zoeller products and swag, the trailer is sure to make a splash at your event no matter the occasion. Book your event today!





# *42, 44, 46*

## Floor Sucker Series

Ideal for intermittent use, these pumps can draw water down as low as 1/8" (3 mm). To reduce maintenance and eliminate clogging, a screened bottom intake design is used. Motor life is enhanced and extended by an energy-efficient design and a UV- protected pump body. Pump discharge is fully adaptable to standard garden hose connections, and a handle is provided for ease of handling.

#### **APPLICATIONS:**

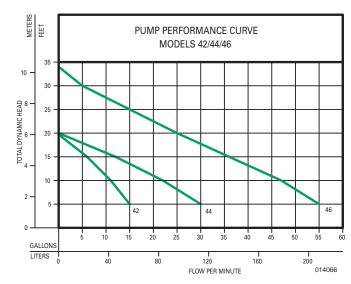
- · General water transfer
- Dewatering

#### **SPECIFICATIONS:**

- 3/4" (19 mm) garden hose outlet
- · Thermally protected motor
- LM44 is AUTOMATIC with no float switch
- Available with 9' or 20' (3 or 6 m) power cord
- Oil free (models 42, 44)
- Temperature rated 104 °F (40 °C)

For more information, see Technical Data Sheet FM2773.





## 311

## **Mighty Mover**

Ideal for intermittent use, this portable and lightweight transfer pump performs at a high level. This type of pump often experiences dry-run conditions, so the metal pump housing and nylon impeller (extra impeller included) can outperform similar products with plastic pump housings. It includes a suction hose and remote suction plate for added convenience.



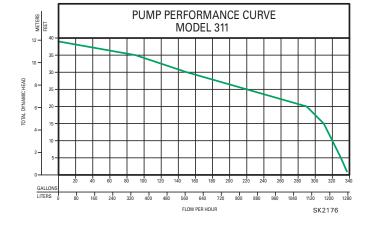
#### **APPLICATIONS:**

- General water transfer
- · Draining water heaters
- · Filling radiant heating lines

#### **SPECIFICATIONS:**

- 3/4" (19 mm) garden hose inlet and outlet
- Includes 6' (2 m) suction hose and remote suction plate
- Available with 6' (2 m) power cord
- Temperature rated 130 °F (54 °C)

For more information, see Technical Data Sheet FM2774.





## 314

### **Water Mover**

Generating almost 50 PSI, this is our most powerful transfer pump. The durable cast iron pump housing and easily serviced brush motor ensure trouble-free operation. For convenience, an over-sized priming handle is included, so no tools are required. The extra-long power cord and pump-mounted on-off switch simplify operation.



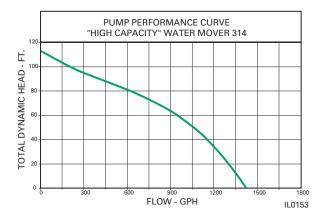
#### **APPLICATIONS:**

- Water transfer
- · Power washing
- · Filling radiant heating lines

#### **SPECIFICATIONS:**

- 3/4" NPT inlet and outlet with lead-free brass garden hose adapters
- Includes suction screen and extra set of brushes
- Available with 20' (6 m) power cord
- Temperature rated 120 °F (49 °C)

For more information, see Technical Data Sheet FM2775.



# *81, 82, 84*

## **Old Faithful**

Ideal for residential sump pits, these column pumps feature an above-pit cover motor design. An adjustable float allows the user to set the on and off points that best meet their needs. The permanently lubricated motor is thermally protected for quiet operation and longer life. The non-clogging vortex impeller and inlet screen help eliminate jamming from debris such as leaves and other small particles.

#### APPLICATIONS:

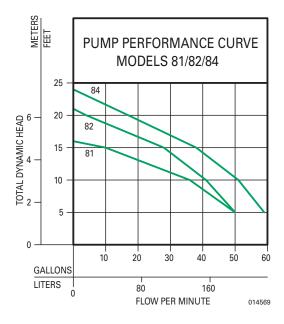
- New sump and residential construction
- Sump pits

#### **SPECIFICATIONS:**

- 1-1/2" or 1-1/4" NPT discharge
- Top inlet eliminates air-locked conditions
- Adjustable float
- 81/82 thermoplastic base, 84 cast iron base
- Temperature rated 130 °F (54 °C)

For more information, see Technical Data Sheet FM2776.







## 49

# Water ||| Ridd'r |||

This compact, robust pump fits into smaller sump basins. The factory-set float switch is set to maximize pump range while ensuring no float hang-ups. The sturdy pump base keeps

larger debris from clogging the pump and prevents the pump from moving around the pit.

#### **APPLICATIONS:**

- Residential sump
- New construction sump

#### **SPECIFICATIONS:**

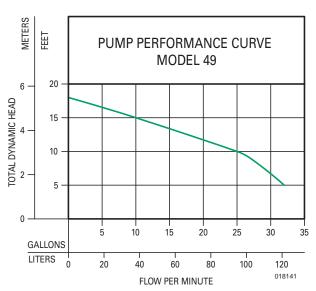
- 1-1/2" NPT discharge
- · Mechanical float
- Available with 10' (3 m) power cord
- 3/8" (9 mm) solids passing

For more information, see Technical Data Sheet FM2777.









# 73, 75

The Models 73 and 75 offer accessible quality for the cost conscious. These submersible pumps are designed for use in residential or light commercial dewatering applications and can be used to transfer groundwater or effluent. The pump includes a cast iron motor housing with a corrosion-resistant, baked-on enamel finish and is designed to provide great heat dissipation from the motor, ensuring a long service life.

#### **APPLICATIONS:**

- · Water transfer
- Sump and dewatering systems
- New sump and residential construction

#### SPECIFICATIONS:

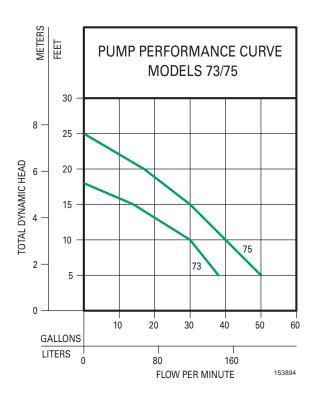
- 1/3 HP (Model 73) and 1/2 HP (Model 75)
- 1-1/2" NPT discharge
- · Thermally protected motor
- Available with 10' (3 m) power cord
- 3/8" (9 mm) solids passing

For more information, see Technical Data Sheets FM2897 and FM2849.











# *53°, 55, 57, 59, 98*

## Mighty-Mate/Flow-Mate

Considered one of America's most popular sump pumps. This robust family of sump pumps is known for reliability, durability and performance. Available with an intergral, 2-pole, snapaction float switch. The heat-dissipating cast iron body with powder coated epoxy finish provides maximum pumping performance under the most extreme conditions. With Zoeller's cool run design, the hermetically sealed, oil-filled motor and non-clogging vortex impeller add up to a long-lasting, trouble-free product. Models 53-0001 and 98-0001 come with the Zoeller LED Plug that allows you to check for power at a quick glance.

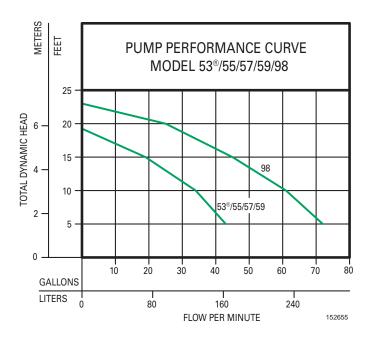
#### **APPLICATIONS:**

- · Water transfer
- Sump and effluent systems
- · Light commercial
- · New sump and residential construction

#### **SPECIFICATIONS:**

- 1-1/2" NPT discharge
- 3/10 HP (53<sup>®</sup>, 55, 57, 59), 1/2 HP (98)
- Zoeller LED Plug on 53-0001 and 98-0001
- · Available in automatic or nonautomatic
- · 1/2" (12 mm) spherical solids capacity
- · Thermoplastic or cast iron base
- · Thermoplastic or cast iron impeller
- Bronze construction available (55/59 series)

For more information, see Technical Data Sheets FM2778, FM2779.





#### **OPTIONAL\* PUMP STAND P/N 10-2421**

- · Reduces potential clogging by debris
- · Replaces rocks or bricks under the pump
- · Made of durable, non-corrosive ABS
- Raises pump 2" (5 cm) off bottom of basin
- Provides the ability to raise intake by adding sections of 1-1/2" or 2" (DN40 or DN50) PVC piping

Automatic model 98-0001

Attaches securely to pump

Nonautomatic model with piggyback

• sump, dewatering and effluent applications NOTE: Make sure float is free from obstruction.

\*Fits series 49, 50, 63, 70, 95, 98,

130, 140 and 150.

"Easy assembly" (pump & disharge pipe not included.)

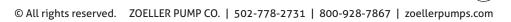










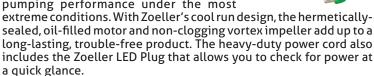




### **Premium Series**

These Premium sump pumps are designed with the very best materials and latest technology. Based on the 50 series sump pump, considered one of America's most popular sump pumps, this product offers advanced switch technology allowing for longer switch life.

This model is constructed of the same heat-dissipating cast iron with powder coated epoxy finish, providing maximum pumping performance under the most





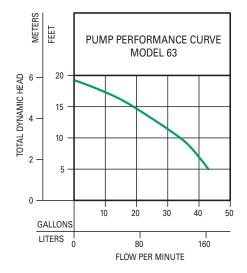
- Water transfer
- Sump systems
- Light commercial
- New sump and residential construction



#### SPECIFICATIONS:

- 1-1/2" NPT discharge
- 3/10 HP
- 1/2" (12 mm) spherical solids capacity
- Zoeller LED plug
- Available in automatic operation only
- Advanced switch technology
- Viton switch arm boot and heavy-duty power cord
- Cast iron, non-clogging vortex impeller
- Cast iron base

For more information, see Technical Data Sheet FM2899.



## 95

## **Premium Series**

The Model 95 Premium sump pump is designed with the very best materials and the latest technology.

Based on the 98 sump pump, one of America's most popular sump pumps, this product offers advanced switch technology ensuring longer switch life. The Premium sump pump also provides 10% higher performance (GPM and TDH) over the Model 98.

This model is constructed of the same heatdissipating cast iron with powder coated epoxy finish, providing maximum pumping

performance under the most extreme conditions. With Zoeller's cool run design, the hermetically-sealed, oil-filled motor and non-clogging vortex impeller add up to a long-lasting, trouble-free product. The heavy-duty power cord also includes the Zoeller LED Plug that allows you to check for power at a quick glance.

- Water transfer
- Sump systems
- Light commercial
- New sump and residential construction

# **APPLICATIONS:**





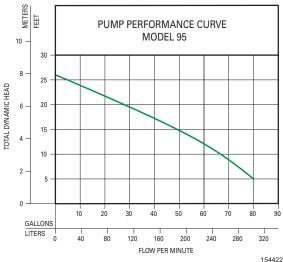




#### **SPECIFICATIONS:**

- 1-1/2" NPT discharge
- 1/2 HP
- 1/2" (12 mm) spherical solids capacity
- Zoeller LED plug
- Available in automatic operation only
- Advanced switch technology
- Viton switch arm boot and heavy-duty power cord
- Non-clogging vortex impeller
- Cast iron base

For more information, see Technical Data Sheet FM2985.





# *137, 139, 140, 145*

## Flow-Mate

In high head dewatering or effluent applications where pumping performance is critical, this robust family of pumps is known for reliability, durability and performance. These pumps are especially suited for harsh environments. Zoeller's cool run design and corrosion-resistant, powder coated epoxy finish add up to a long-lasting, trouble-free product.

#### **APPLICATIONS:**

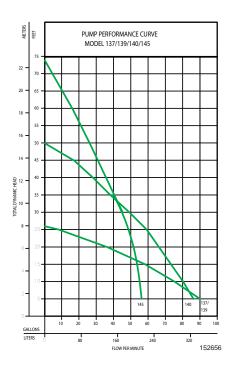
- STEP or onsite applications
- Water transfer
- · Light commercial dewatering

#### SPECIFICATIONS:

- 1-1/2" NPT discharge
- 1/2 HP through 1 HP
- · Available in automatic or nonautomatic
- Model 137, 139, 140: 1/2" (12 mm) spherical solids capacity with vortex impeller
- Model 145: 3/4" (19 mm) spherical solids capacity with vortex impeller
- · Bronze construction available (139 series)
- High head version available (145 series)
- Tandem shaft seal versions available for added protection on models 140/145.

For more information, see Technical Data Sheets FM2782, FM2783.





## *151, 152, 153*

### **Dose-Mate**

This is our fastest growing line of effluent pumps. The 150 series is truly a workhorse designed for reliability under extreme conditions in an effluent environment. 150 series pump curves cover a wide range of applications. They are well suited to applications with low pressure pipe (LPP) and enhanced flow STEP systems. Zoeller's cool run design and corrosion-resistant, powder coated epoxy finish, in addition to the hermetically sealed, oil-filled motor and non-clogging vortex impeller add up to a long-lasting, trouble-free product.

#### **APPLICATIONS:**

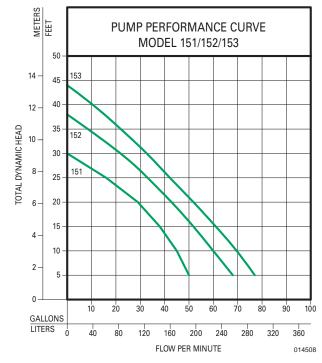
- STEP or onsite applications
- · Light commercial dewatering

#### SPECIFICATIONS:

- 1-1/2" NPT discharge
- 3/10 HP through 1/2 HP
- Available in nonautomatic or with a variable level piggyback mechanical switch
- 1/2" (12 mm) spherical solids capacity with vortex thermoplastic impeller

For more information, see Technical Data Sheet FM2784.











# *161, 163, 165*

## Flow-Mate

Heavy duty construction with oversized bearings and a balanced bronze, non-clogging vortex impeller allow these pumps to stand up to the highest heads and maximum flows. They are well suited to applications with low pressure pipe (LPP) and enhanced flow STEP systems. Using Zoeller's cool run design, we added fins to these pumps, lowering operating temperatures. The corrosion-resistant, powder coated epoxy finish and hermetically sealed, oil-filled motor add up to a long-lasting, trouble-free product.

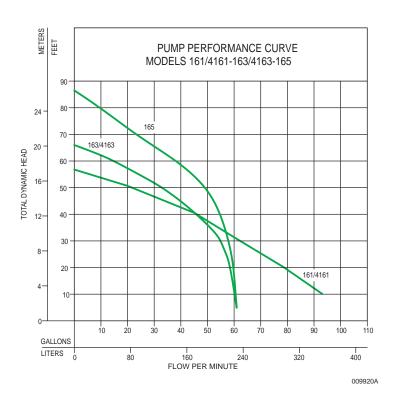
#### **APPLICATIONS:**

- · Onsite or septic applications
- · Enhanced flow STEP systems
- · Commercial dewatering
- Sump/dewatering

#### **SPECIFICATIONS:**

- 1-1/2" NPT discharge (2" (10-1305) or 3" (10-1306) bolt on flange available
- 1/2 HP through 1 HP
- Available in automatic or nonautomatic
- 3/4" (19 mm) spherical solids capacity with cast iron vortex impeller
- · Tandem shaft seal versions available for added protection
- · Thermally protected motor

For more information, see Technical Data Sheet FM2785.









# *185, 186, 188, 189, 191*

### Flow-Mate

Heavy duty construction with oversized bearings and a balanced bronze, non-clogging vortex impeller allow this series of pumps to stand up to the highest heads and maximum flows. They are well suited to applications with low pressure pipe (LPP) and enhanced flow STEP systems. Using Zoeller's cool run design, we added fins to these pumps, lowering operating temperatures. The corrosion-resistant, powder coated epoxy finish and hermetically sealed, oil-filled motor add up to a long-lasting, trouble-free product.

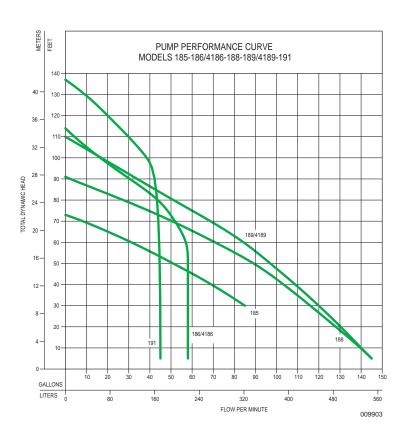
#### **APPLICATIONS:**

- · High head onsite or septic applications
- Enhanced flow STEP systems
- Commercial dewatering

#### SPECIFICATIONS:

- 1-1/2" NPT discharge (2" (10-1305) or 3" (10-1306) bolt on flange available)
- 1 HP through 2 HP
- Available in automatic or nonautomatic
- Model 180 Series: 3/4" (19 mm) spherical solids capacity with cast iron vortex impeller
- Model 191: 5/8" (16 mm) spherical solids capacity with bronze vortex impeller
- Tandem shaft seal versions available for added protection
- Thermally protected motor

For more information, see Technical Data Sheet FM2786.











## **Self-testing Backup Systems**



## Z Control Enabled Systems

The Aquanot® Fit self-testing sump pump systems take over when the main power is interrupted or the primary pump isn't getting the job done. The powerful, self-testing smart-controllers overcome problems caused by dormancy and system neglect. Fit is internet-connected through Zoeller's Z Control® Platform, granting users free 24/7 monitoring and remote control of equipment with the Z Control® mobile app or web interface. You can also recieve free emails, texts, and push notifications about system status and alerts.

U.S. Patent No. D740329



The best protection money can buy!

- Highest performance and efficiency pump
- · Two independent switches, supervised by controller
- · Local alarms and indicators
- Self-testing controller with built-in battery maintenance and alarms
- Z Control® free access
  - Wifi and ethernet connections
  - Remote monitoring and control
  - Email, text and push notifications
  - Additional system data, status, and tools

#### **SPECIFICATIONS:**

- 1-1/2" NPT discharge
- · Integrated check valves
- Fit includes 508 DC pump Fit controller with built-in wiFi, vertical operational switch, high-water reed sensor switch, battery box, fittings

For more information, see Technical Data Sheet FM3124.



#### **PERFORMANCE**

The DC pump performance at 12.7 Vdc

Discharge Feet of Head	5 (1.5 m)	10 (3 m)	15 (4.6 m)	28 (85 m)
Flow GPM (LPM)12.7 volts	43 (163)	35 (132)	27 (102)	Shut- off Head





Search: "Z Control"





## Self-testing 12 Volt Battery Backup System

The high performance Aquanot® Spin 508 provides extra protection when a primary AC pump shuts down due to a power outage or another electrical problem. A smart, UL recognized charger/controller with battery burnout and overcharge protection maximizes battery life and provides over 7 hours of continuous pumping. All necessary pipes, valves, and fittings are included to transform your existing system into a complete AC/DC sump pump system. The alarm, light indicators, and selftesting ensure peace of mind for the homeowner.

#### **SPECIFICATIONS:**

- Self-testing pump
- Early warning and smart diagnostics
- Supervised switch connections
- Optional high water sensor
- 1-1/2" NPT discharge
- Includes all necessary fittings for installation

For more information, see Technical Data Sheet FM3165.



508-0005 shown



## Self-testing 12 Volt Battery Backup System

Entry level backup system. When basic performance and protection is all that is needed, this quality pump, charger, and switch will provide peace of mind.

#### SPECIFICATIONS:

- Solid performance pump
- Fully automatic pump and charger
- Heavy duty, fully automatic, supervised switch
- Self-testing controller
- 3 year limited warranty

For more information, see Technical Data Sheet FM2804.



507-0005 shown





## Preassembled 12 Volt Battery Backup & Primary Sump Pump Packages

Save time and money with our top selling primary and backup sump pump packages. These systems are factory assembled with 1-1/2 schedule 40 PVC pipe and fittings for simple drop-in" installation. Packages come with switches, automatic, agency approved charger/controllers, and an efficient pump providing up to 7 hours of continuous pumping on battery-only power. Battery burn-out, overcharge protection, and diagnostics are also included for added peace of mind.

ProPak models include choices of primary pumps: 73, 53, 63, and 98. Zoeller LED Plug comes standard on all primary pumps available with the Spin and Fit ProPak Systems.

\* Primary electric sump pump only included with ProPak models. U.S. Patent No. D740329



#### SPECIFICATIONS:

- 508 pump rated 2,040 GPH @ 10'
- M53®/63 pump rated 2,040 GPH @ 10'
- M98 pump rated 3,660 GPH @ 10'
- All primary pumps with this system include the Zoeller LED Plug that allows you to check for power at a quick glance.
- · Self-testing and battery monitoring system for peace of mind
- Intelligent multi-stage charger/controller with alarm, light indicator and warning system
- · Two independent, supervised switches
- Heavy duty mechanical operating switch
- High water sensor with alarm and pump run redundancy
- · Built in Wi-Fi
- FREE Z Control® access
- Email, text, and push notifications
- Remote monitoring and control
- 3-year limited warranty on system with Models 53® and 98 pumps
- 5-year limited warranty on system with Model 63 pump

For more information, see Technical Data Sheet FM2803.



508-0015 shown



Free Z Control® account at







Search: "Z Control"





#### **SPECIFICATIONS:**

- 508 pump rated 2,040 GPH @ 10'
- M53® pump rated 2,040 GPH @ 10'
- M 98 pump rated 3,660 GPH @ 10'
- All primary pumps with this system include the Zoeller LED Plug that allows you to check for power at a quick glance.
- · Self-testing and battery monitoring system for peace of mind
- Intelligent multi-stage charger/ controller with alarm, light indicator and warning system
- · Heavy duty mechanical operating switch
- · Optional High water sensor with alarm and pump run redundancy
- · 3-year limited warranty



508-0007 shown



#### SPECIFICATIONS:

- 507 pump rated 900 GPH @ 10'
- M73 pump rated 1,800 GPH @ 10'
- · Fully automatic pump and charger
- · Heavy duty, fully automatic, supervised switch
- Self testing controller
- Multi-stage battery charger with component LED indicators and audible alarm
- 3-year limited





## **Zoeller Preassembled Backup Systems**

(Table FM3219) MODEL COMPARISON ZOELLER BATTERY BACKUP SYSTEMS						
		Aq <u>uaNo</u> t 508 Fit	Aq <u>uaNo</u> t 508 Spin	Aq <u>vaNo</u> t 507 Key		
PERFORMANCE GPM @ 10' 12.6 V		34	34	15		
RUN TIME with 12 V battery	- continuous	6 hours	6 hours	7 hours		
	- 10% duty cycle	48 hours+	48 hours+	48 hours+		
Total estima	ted gallons per battery	11,900	11,900	9,500		
Self-testing		Yes	Yes	Yes		
<b>Z</b> Z Control <sup>*</sup>		Yes	No	No		
Text/Email/App notification		Yes	No	No		
Se	condary float	Yes	Optional 10-4830	No		
Float monitoring		Yes	Yes	Yes		
Battery re	Battery replacement reminder		No	No		
List of alarms/status		4 local/audible 10 more online	4 local/audible	4 local/audible		
Warranty		3 years 5 years w/ M63 Propak	3 years	3 years		
Item #		508-0014	508-0005	507-0005		
	combo systems ary pump included	with M53 <sup>®</sup> , .3 HP 508-0015 with M98, .5 HP 508-0016 with M63, .3 HP 508-0020	with M53 <sup>®</sup> , .3 HP 508-0006 with M98, .5 HP 508-0007	with M73, .3 HP 507-0013		
All Aquanot bat	Batteries teries are Maintenance Free (MF)	10-1450 AGM 27 10-0761 Flooded 31				





## Water-Powered Emergency Backup Sump Pump System

Zoeller's FLEX® is a high capacity, high efficiency, water-powered backup system. The FLEX® takes over seamlessly when your primary sump system fails. Horizontal OR vertical installation capability allows FLEX® to fit most sump applications.

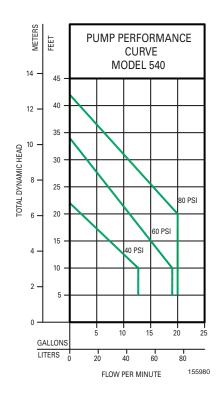
#### APPLICATIONS:

• Continuous pumping during power outage using city water pressure.

#### **SPECIFICATIONS:**

- No electricity or batteries required
- Municipal/city water pressure powered system
- Unit requires 3/4" inlet line to operate properly
- Adaptable to 1-1/4" or 1-1/2" suction pipe
- Engineered for trouble-free operation
- Non-corrosive materials
- · Removes up to 2 gallons for every gallon used

For more information, see Technical Data Sheet FM3169









# 264, 266, 267, 270

#### **Waste-Mate**

Considered one of America's most popular sewage ejectors, this robust family of pumps is known for reliability, durability and performance. These pumps are industry-proven, built of cast iron with stainless steel hardware. Comes with an integral, 2-pole, snapaction float switch. The heat-dissipating castiron body with powder coated epoxy finish provides maximum pumping performance under the most extreme conditions. With a cool run design, the hermetically sealed, oil-filled motor and non-clogging vortex impeller add up to a long-lasting, trouble-free product.

#### **APPLICATIONS:**

- · Residential and light commercial sewage and dewatering
- New construction
- Wastewater / lift stations

#### SPECIFICATIONS:

- 2" NPT discharge
- 4/10 HP through 1 HP
- · Available in automatic or nonautomatic
- 2" (50 mm) spherical solids capacity with vortex thermoplastic impeller on model 270, cast iron impeller on models 266 and 267
- Models 266 and 267 available in 3 phase voltages

For more information, see Technical Data Sheets FM2788, FM2789, FM2790.







## 212

The Model 212 offers accessible quality for the cost conscious. This submersible pump is designed for use in residential or light commercial sewage applications and can be used to transfer groundwater, effluent, or sewage. The pump includes a cast iron motor housing with a corrosion-resistant, baked-on enamel finish and is designed to provide great heat dissipation from the motor, ensuring a long service life.

#### **APPLICATIONS:**

- Residential sewage
- Water transfer and dewatering
- New construction

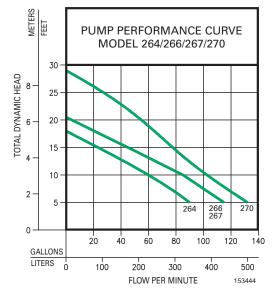
#### **SPECIFICATIONS:**

- 2" NPT discharge
- 1/2 HP
- 2" (50 mm) spherical solids capacity with non-clogging engineered plastic vortex impeller

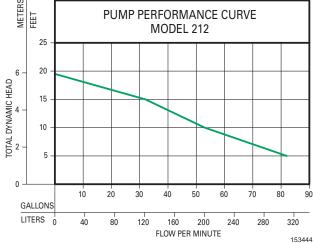
For more information, see Technical Data Sheet FM2850.











# TUELLER. &

# 282, 284

### **Waste-Mate**

Heavy duty construction, oversized bearings and balanced non-clogging vortex impellers allow these pumps to stand up to the highest heads and maximum flows. Using Zoeller's cool run design, we added fins to these pumps, lowering operating temperatures. The corrosion-resistant, powder coated epoxy finish and hermetically sealed, oil-filled motor add up to a long-lasting, trouble-free product.

#### **APPLICATIONS:**

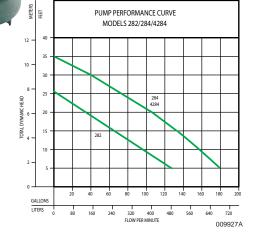
- · Commercial sewage and dewatering
- Wastewater
- · Lift stations

#### SPECIFICATIONS:

- 2" NPT discharge, 3" (10-1306) bolt on flange available
- 1/2 HP and 1 HP
- Available in automatic or nonautomatic
- 2" (50 mm) spherical solids capacity with cast iron vortex impeller
- · Thermally protected motor
- Tandem shaft seal versions available for added protection

For more information, see Technical Data Sheet FM2791.





## *292, 293, 294, 295*

## **Waste-Mate**

Heavy duty construction, oversized bearings and balanced non-clogging vortex impellers allow these pumps to stand up to the highest heads and maximum flows. Using Zoeller's cool run design, we added fins to these pumps, lowering operating temperatures. The corrosion-resistant, powder coated epoxy finish and hermetically sealed, oil-filled motor add up to a long-lasting, trouble-free product.

#### **APPLICATIONS:**

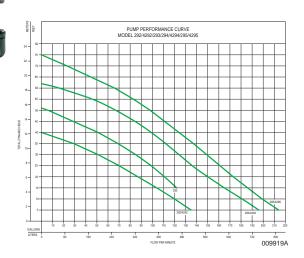
- · Commercial sewage and dewatering
- Wastewater
- Lift stations

#### **SPECIFICATIONS:**

- 2" NPT discharge, 3" (10-1306) bolt on flange available
- 1/2 HP through 2 HP
- Available in automatic or nonautomatic
- 2" (50 mm) spherical solids capacity with cast iron vortex impeller
- · Thermally protected motor
- Tandem shaft seal versions available for added protection

For more information, see Technical Data Sheet FM2792.



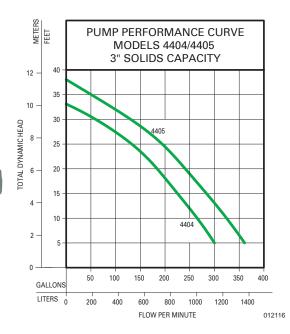




# 4404, 4405

#### **Waste-Mate**

Designed to handle large solids and high flow rates, these pumps are ideal for quickly removing water as well as raw waste. Suited for parking lots and storm water transfer, the oversizedbearingsandbalancednon-clogging vortex impellers allow these pumps to meet the most demanding applications. Using our cool run design, we added fins to these pumps, lowering operating temperatures. The corrosion-resistant, powder coated epoxy finish and hermetically sealed, oil-filled motor add up to a long-lasting, trouble-free product. Rail systems are available for ease of installation and removal.



#### **SPECIFICATIONS:**

- 4" ANSI flange discharge
- 2 and 3 HP
- Tandem shaft seal versions for added protection
- Thermally protected motor

For more information, see Technical Data Sheet FM2793.



# *611, 621, 631, 641, 651, 661*

## **Sewage Waste**

Engineered for large commercial and industrial applications, these pumps utilize extended vane ductile iron impellers for improved efficiency and performance. The tandem seal design provides additional protection from abrasives typically found in demanding applications. Cooling fins, not commonly found in this type of pump, lower operating temperatures, providing longer motor and bearing life. Rail systems are available for ease of installation and removal.

#### **APPLICATIONS:**

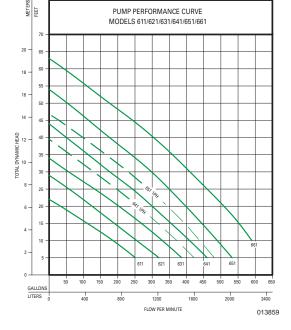
- Industrial and commercial wastewater
- Storm water removal
- Engineered lift stations

#### **SPECIFICATIONS:**

- 3" NPT vertical or 3"or 4" ANSI flange discharge
- 1 HP through 7-1/2 HP
- 2-1/2" (64 mm) spherical solids capacity with cast iron, two vane, semi–open impeller
- Hazardous location/explosion proof, nonautomatic version also available
- Tandem shaft seal for added protection

For more information, see Technical Data Sheet FM2794.









# 912 Package Systems

# Simplex Sewage Package Systems (job ready/assembled)

#### SPECIFICATIONS:

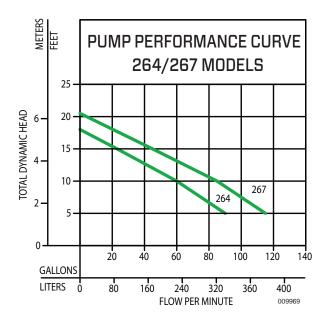
- · More choices, easier installation and fast delivery
- · Saves labor and reduces installation errors
- 2" (50 mm) solids-handling pump
- 2" PVC discharge pipe, 30" (76 cm) long on 18" x 30" (46 x 76 cm), 24" (61 cm) long on 24" x 24" (61 x 61 cm)
- Basins polyethylene, poly-foam or fiberglass construction with poly or solid steel covers and 4" pipe seal hub, 4" PVC hub (deluxe) or 4" cast iron hub on L.A. Code Systems
- Check valve options 30-0151, 30-0020, 30-0021, 30-0101 or 30-0103 (not included)
- Systems available with alarms and preinstalled alarm float.
- Side discharge systems rated for outdoor burial: solid polyethylene on side
- 3/16" (5 mm) vent hole drilled

See FM3467 for further information.



912-0007 shown

## 24" X 24" Simplex Sewage System



See FM2810 for further information.



912-1141 shown





#### **GRINDER PUMPS**

**803**, **805**, **807**Fractional HP Grinder Series. World's first integral automatic grinder. All cast iron grinder series for difficult residential applications where ejectors struggle. Handles entire household of "flushable" materials. Available in 115V or 200-230 volt for residential use without commercial costs.

U.S. Patent No. 8,562,287

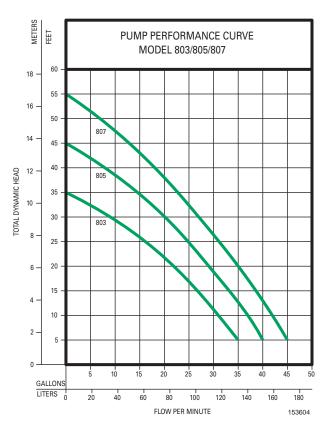
#### **APPLICATIONS:**

- Residential wastewater
- Light commercial

#### **SPECIFICATIONS:**

- 1-1/4" NPT discharge
- 803 1/2 HP, 805 3/4 HP, 807 1 HP
- Cast iron construction
- Oil-filled for optimal heat dissipation
- Thermally-protected motor

For more information, see Technical Data Sheet FM2882.







Available in package systems. See page 25



## *818, 820*

## Grinder Pumps 1.0 & 2.0 HP

This pump is constructed of corrosion-resistant cast iron with a powder coated epoxy finish and stainless steel hardware. The hardened stainless steel Tri-Slice® cutter provides scissoraction style cutting that helps eliminate binding and roping of material around the cutter. The thermally protected, oil-filled motor and external cooling fins allow the pump to run cooler. Available in single phase and three phase configurations.

U.S. Patent No. 8,562,287

#### **APPLICATIONS:**

- Residential and light commercial sewage grinder applications
- Pressure sewer systems

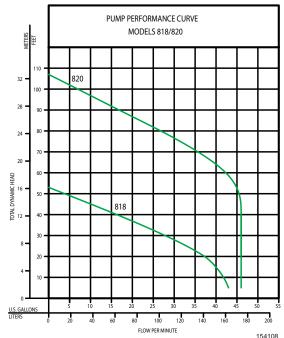
#### **SPECIFICATIONS:**

- Tri-Slice<sup>®</sup>, two-bladed, high-torque cutter
- Scissor-style cutting action shreds solids down to 7/32" (5 mm) and smaller
- 1-1/4" NPT discharge
- Rockwell C55-60 hardened 440C stainless steel cutter and disc
- Vortex impeller





Tri-Slice®, two-bladed, high-torque cutter







# *840, 841*

## 2 HP Grinder Pumps, Reversing & Single Directional

Constructed of corrosion-resistant cast iron with a powder coated epoxy finish and stainless steel hardware, built for years of reliable service. The thermally protected, oil-filled motor and external cooling fins allow the pump to run cooler than most. The hardened 440C stainless steel star shaped cutter provides scissor-action style cutting that helps eliminate binding and roping of material around the cutter. The 840 Shark® offers the industry's only automatic, reversing impeller and cutter assembly that virtually doubles the service life of ordinary grinder.

#### **APPLICATIONS:**

- Residential, commercial and municipal sewage grinder pump systems
- Pressure sewer systems

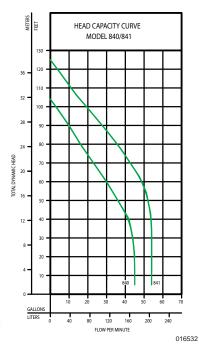
#### **SPECIFICATIONS:**

- Double shaft seal for added protection
- Moisture detection and temperature protection
- 1-1/4" NPT discharge
- · Model 840 AUTO-REVERSING star-cutter eliminates clogging
- Rockwell C55-60 hardened 440C stainless steel cutter and disc
- Vortex impeller
- · Hazardous location/explosion proof version available

For more information, see Technical Data Sheet FM2799.











## *810, 815*

## Progressing Cavity Grinder Pump

Designed for high pressure sewer systems, our Shark® Series progressing cavity grinder pumps offer a head capacity up to 240 feet (73 m). Constructed of corrosion-resistant cast iron with a powder coated epoxy finish and stainless steel hardware, these pumps are built for years of reliable service. The thermally protected, oil-filled motor and external cooling fins allow the pump to run cooler. An internal pressure relief valve protects the motor and hydraulic components from extreme spikes in sewer pressure. The hardened stainless steel Tri Slice® cutter provides scissor-action style cutting to virtually eliminate binding and roping of material around the cutter.

#### **APPLICATIONS:**

- · Residential sewage removal for pressure sewer systems
- Pressure sewer systems

#### **SPECIFICATIONS:**

- 1-1/4" NPT discharge
- 1 and 2 HP
- Rockwell C55-60 hardened 440C stainless steel cutter and disc

For more information, see Technical Data Sheet FM2796.





## 932

## Simplex Replacement Grinder

The Progressing Cavity Grinder Replacement Pump easily adapts to a competitors' system. The oil-filled, hermetically sealed, cool run motor design and hardened stainless steel cutter ensure long life and minimal maintenance. Unit comes completely assembled with check valve, anti-siphon valve, pressure relief valve, quick disconnect plumbing coupling and electrical receptacle fitting. Includes high level alarm as an added convenience.

#### **APPLICATIONS:**

- · Retrofit for existing progressing cavity grinder systems
- Pressure sewer systems

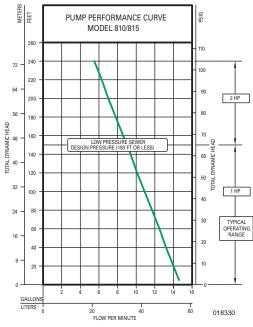
#### **SPECIFICATIONS:**

- 1-1/4" NPT discharge
- Bolts to existing progressing cavity grinder pump systems
- Rockwell C55-60 hardened 440C stainless steel cutter and disc

For more information, see Technical Data Sheet FM2465.











# 915 Package Systems 1/2 & 1 HP Packages

The fractional HP grinder pumps are now available in package systems. This job-ready (non-suspended) system uses our innovative, stainless steel Tri-Slice® cutter, which requires little or no maintenance. The hardened stainless steel cutter is ideal for handling difficult solids such as wipes, rags, towels, etc. that can jam traditional style ejector pumps.

#### **APPLICATIONS:**

- · Residential wastewater
- · Light commercial

#### SPECIFICATIONS:

- 1-1/4" top discharge
- 803 1/2 HP, HP, 807 1 HP
- · Cast iron construction
- · Oil filled for optimal heat dissipation
- Available in 18" x 30" (46 x 76 cm) polystructural foam or 24" x 24" (61 x 61 cm) poly basin. Consult factory for additional options.
- · Thermally-protected motor



18" x 30" (46 x 76 cm)

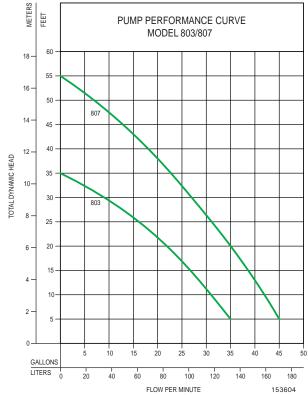






10-4012

Cutter Blade





24" x 24" (61 x 61 cm)

For complete product information, visit: zoellerpumps.com



# **QLS SERIES**

PREFABRICATED LIFT STATIONS WITH Z-RAIL® TECHNOLOGY

Complete effluent sewage or grinder package systems are factory assembled for quicker, easier installation at the jobsite. Zoeller's Z-Rail® Technology with powder coated, ductile iron elbows and brackets provides longer life and reliability. Dual-rail system offers added support and stability while raising and lowering pumps compared to single-rail systems. A wide variety of basin diameters and depths are stocked to accommodate almost any job. Cover choices include solid fiberglass and either steel or aluminum hatches.

#### Z-Rail® System

Both the disconnect portion and the upper guide rail supports are made of domestic epoxy powder coated ductile iron, providing superior strength. Dual guide rails add stability, ensuring that the pump will not spin on the rail during installation or removal.

#### Basin

Zoeller Company stocks many different basin and cover options to fit a multitude of wastewater collection projects. Basin sizes from 24" x 48" to 48" x 120" meet most application needs. Customized packages available.

#### **Basin Cover**

Solid fiberglass, aluminum hatch, and steel hatch covers are stocked for QLS Series® packages.

#### **Three Way Ball Valve**

The QLS Series® systems utilize a 3-way ball valve in duplex configurations. The valve is positioned so that the service providers can easily isolate pumps without entering the basin.

#### Pipe Seal Hub

A 4" pipe seal is provided as a convenient field-installed inlet hub.

#### **AFD**

QLS Series® basins come with an anti-floatation collar to resist bouyancy in high groundwater locations.

#### Flex-Boot Discharge Connection

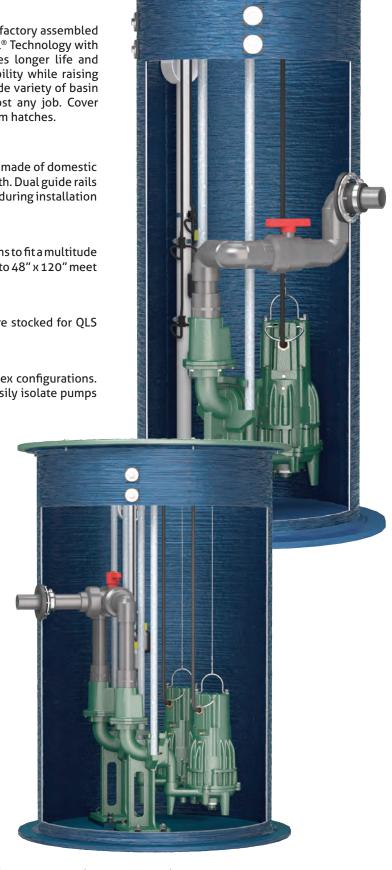
A flexible, stable discharge seal remains watertight despite external pressures due to pipe settling.

#### **Schedule 80 PVC Piping**

Schedule 80 PVC discharge piping provides greater support and dependability with its thicker walls and higher pressure rating.

#### **Engineered Lift Stations**

Zoeller offers a complete line of prepackaged and preassembled lift stations using sump, effluent, sewage or grinder pumps! Utilizing everything from a small 1/2 HP pump to the large 7-1/2 HP non-clogging pump, Zoeller will prefabricate any lift station as an engineered factory built system. The headache of keeping track of product compatibility is eliminated, and the contractor is ensured that each system's components will properly operate with one another, and simplify installation.





Model 519 and Model 522

This fully automatic, easily installed, condensate pump removes condensation from air conditioning equipment, condensing furnaces, dehumidifiers, ice makers, water coolers and refrigeration systems.

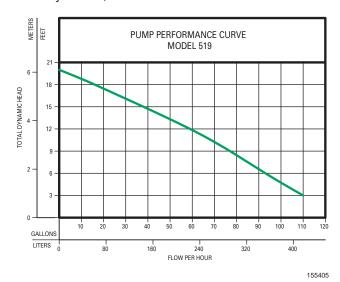
#### **APPLICATIONS:**

Automatically removes condensation from a variety of systems including air conditioning units, dehumidifiers and refrigeration systems.

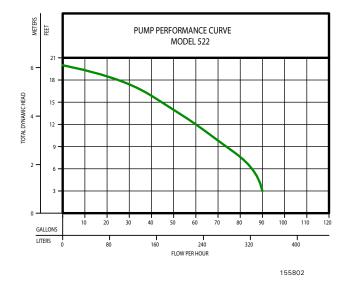
#### **SYSTEM INCLUDES:**

- · Handles condensate up to 140 °F (60 °C)
- 20 ft (6.1 m) TDH
- Wall mounts
- Four inlet options (Model 519), two inlet options (Mode 522)
- 3/8" Discharge
- · Stainless steel shaft
- Built-in safety switch and check valve
- 6 ft power cord with ground
- Thermally protected
- Option available to include 20' of 3/8" clear tubing
- Built-in check valve
- · Safety switch and alarm indicator lights
- Oversized reservoir

For more information, see Technical Data Sheet FM2808.







## **Inline Switches**

for use with Condensate Pumps 10-4754; Inline Switch, 10-4755

- Identifies clogs or blockages in the condensate drain line
- Deactivates equipment and notifies user of a possible overflow situation
- Installed in-line on A/C equipment directly at the drain pan outlet or directly at the secondary drain pan outlet







## Add a bathroom almost anywhere without breaking concrete!

- Allows for the addition of a bathroom in previously unplumbed locations
- Easy to install as a freestanding unit or as a discrete installation behind the wall
- Collects used water from all fixtures including sinks, faucets, tubs, showers, and more
- Automatic reset protects the pump from thermal overload
- No gravity drain required
- Non-clogging vortex impeller for reliable operation
- Smooth surface for easy cleaning

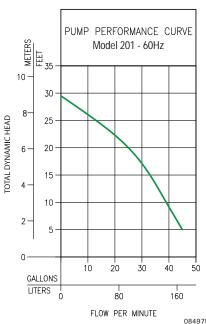
#### Owik Jon®

Patent No.: US 11,905,695 B2

#### **SPECIFICATIONS:**

- Quiet, preassembled 1/2 HP grinder pump system
- Carbon/ceramic mechanical shaft seal for long life Upper and lower ball bearings for efficient and quiet operation
- Non-clogging vortex impeller for reliable operation
- Withstands total immersion (IP68)
- 1" Discharge elbow with built-in check valve
- Standard 6' (1.8 m) cord with right angle plug
- Tri-Slice® Cutter Technology three independent cutting channels provide over 250,000 cuts per minute
- Premium investment-cast 440C stainless steel cutter and cutter plate
- Flushables: toilet paper, organic waste, and sanitary
- For residential and light commercial applications

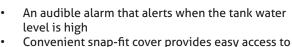
For more information, see Technical Data Sheet FM3344.



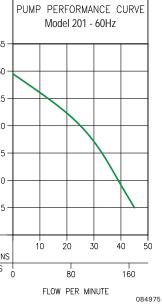


#### **Qwik Alarm**™

(Model 10-5090) - for use on the Premier where a separate vent is used.



- alarm settings and the battery compartment Smooth white polypropylene case that is easy to
- Preassembled alarm and seal for quick and easy installation
- Low profile, compact design blends in well in a bathroom setting
- IPX8 rated device that can withstand periods of total immersion, so it is ideal for damp areas





10-5090 Qwik Alarm™ for Qwik Jon® Premier

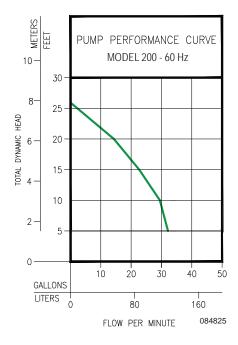


# CHOICE CHOICE

#### **SPECIFICATIONS:**

- A quiet, preassembled 1/3 HP pump and macerator system
- · Carbon/ceramic mechanical shaft seal for long life
- Upper and lower ball bearings for efficient and quiet operation
- Non-clogging vortex impeller for reliable operation
- Recessed side handles for carrying
- Convenient snap-fit covers for easy access to macerator and electrical junction box
- · Discharge elbow with built-in check valve
- Standard 6' (1.8 m) cord
- · Flushables: toilet paper and organic waste
- For residential applications

For more information, see Technical Data Sheet FM3343.







#### **Qwik Jon®Toilet**



#### Model 202 - for all Qwik Jon® models.

- · ADA compliant elongated bowl
- EPA Water Sense compliant toilet with 1.28 gallon (4.8 L) per flush includes flush handle, fill and flush valve
- Rear spigot toilet for direct connection to any Qwik Jon® model

For a complete system, order:

201-4000 - (includes the Qwik Jon® Premier and toilet) delivered in three boxes.

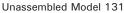
200-4000 - (includes the Qwik Jon® Choice and toilet) delivered in three boxes

**Optional Extension Kit** (Model 10-3050) - for recessed or behind-the-wall installations. Can be used with all Qwik Jon® models.



# **Drain Pumps**Put A Sink Anywhere







These are our most versatile water collection systems. No need to dig a sump pit or re-route plumbing drain lines. This compact system includes everything you need to remove water from areas without gravity drains. Excellent for bar sinks, laundry trays or condensate removal. There are no inlet filters to clean, and easy compression fittings make for quick and trouble-free installations. As an added bonus, the P-trap can be located inside the tank if necessary.

#### **APPLICATIONS:**

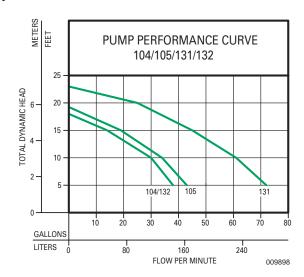
- Under bar
- Beauty salon / parlors
- Work sinks
- Laundry trays

#### **SPECIFICATIONS:**

- 1-1/2" NPT discharge with 1-1/2" threaded vent
- 5 gallon (19 liter) capacity poly basin
- Includes 1-1/2" check valve

For more information, see Technical Data Sheet FM2801.

	104	105	131	132		
Preassembled	N	Y/N	N	Y		
Pump Model	M73	M53	M98	M73		
Pump Construction	Engineered plastic	Cast iron with plastic base	All cast iron	Engineered plastic		
HP	1/3	3/10	1/2	1/3		
AMPS	3.1	9.7	9.4	3.1		
RPM	3400	1550	1725	3400		
Solids passing	3/8" (9 mm)	1/2" (12 mm)	1/2" (12 mm)	3/8" (9 mm)		
Max temp.	110 °F (43 °C)	130 °F (54 °C)	130 °F (54 °C)	110 °F (43 °C)		
Cord length	9' (2.7 m)	9' (2.7 m)	15' (4.6 m)	9' (2.7 m)		
Check valve	All systems include a check valve. Preassembled systems include a space- saving, internal check valve threaded into the discharge of the pump.					
Warranty	2yr	3yr	3yr	2yr		





# Crawl Space®

## **Moisture and Mold Protection**

This system is designed specifically with tight or restricted spaces in mind. Indoors or outdoors, eliminate standing water from areas without proper drainage. Prevent the accumulation of moisture, fungus, and odors commonly found in residential crawl spaces. The perforated basin and solid lid keep large debris from entering the pit, eliminating maintenance.

#### **APPLICATIONS:**

- · Dewatering in crawl spaces
- · Dewatering under mobile homes

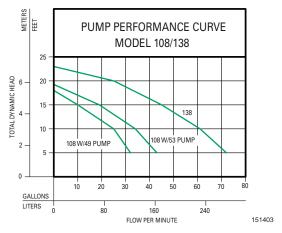
#### SYSTEM INCLUDES:

- Automatic pump
- 24' (7 m) hose
- Tank assembly
- · Check valve

For more information, see Technical Data Sheet FM2802.







# 109 Scale Removal Series



This preassembled system is engineered to meet the flushing requirements of tankless water heaters. An internal, reusable filter sock captures debris removed from the pipe system. A durable, air-filled 1/6 HP submersible pump and 3/4" stainless steel braided flush lines ensure quality and reliability for years of trouble-free performance. Recommended by professionals job after job, this system is an ideal and economical tool for plumbing contractors who install and service tankless water heating systems.

Patent pending

#### APPLICATIONS:

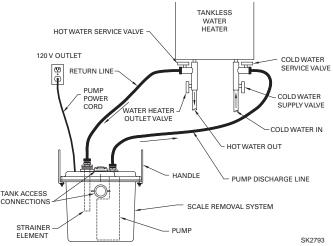
Removes line build-up in tankless water heating units

#### **SYSTEM INCLUDES:**

- 1/6 HP pump
- · Stainless steel braided hoses
- Poly tank with sealed cover
- Fittings

 $For more information, see \ Technical \ Data \ Sheet \ FM2807.$ 







# Oil Guard® Systems

Engineered to recognize the difference between water and oil, these systems help protect the environment and equipment from the dispersion of oils and/or hydrocarbons by only pumping water. They are perfect for elevator sumps, transformer vaults, or other applications where there is a need to remove water containing oil. Independently verified by OnSpeX, division of CSA, the Oil Guard® includes one of four pump models, Oil Smart® Pump Switch and alarm. Multiple features and options are available including NEMA-4X alarm panel enclosure, audible and light alarms and dry contacts. Turn this product into a connected device using the Z Control® Cloud. Monitor dry contacts to recieve email, text, and push notifications.

#### **APPLICATIONS:**

- Elevator vaults
- Transformer vaults
- Boat hulls

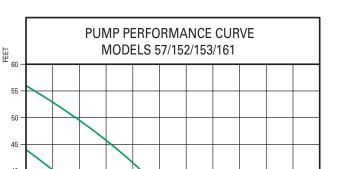
#### **SPECIFICATIONS:**

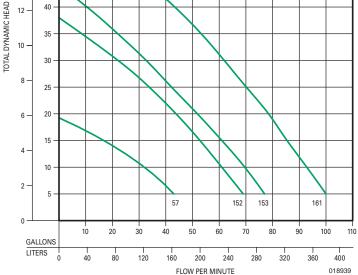
- NEMA 4X alarm panel includes dry contacts for remote alarm
- Elevator systems require a minimum 50 GPM (189 LPM) and a maximum 6' (2 m) pump cord
- · Custom systems available

For more information, see Technical Data Sheet FM2809.









For complete product information, visit: zoellerpumps.com

METERS

18 -

16

14 -



# **High-Temp Pumps**

This series of submersible pumps is designed for use in residential or commercial dewatering applications and can be used to transfer groundwater and wastewater. These durable cast iron pumps include a powder coated epoxy finish to prevent corrosion and are designed to meet specifications with assurance by using high temperature parts rated for continuous 200 °F (93 °C) contact. Available in a variety of models and performances, each pump is 100% factory tested to ensure quality and reliability for years of trouble-free performance! This attention to detail is an inherent feature of every model in this pump series, making it one of the most reliable in the industry.

#### **APPLICATIONS:**

- · Commercial laundry facilities
- · Boiler blow down application
- · Maintenance facilities

#### SPECIFICATIONS:

- 2000 Series rated for intermittent 200 °F (93 °C)
- 3000 Series rated for continuous 200 °F (93 °C)
- 1-1/2" 3" NPT discharge
- 3/10 HP through 1/2 HP
- · Available in automatic or nonautomatic

For more information, see Technical Data Sheet FM2811.





Model 3098



# Agricultural

## Models 4290 and 4291 High Head Pump

This series of submersible sewage pumps is designed for use in agricultural applications, lagoon recirculation systems, and sump pit systems. These durable cast iron pumps include a powder coated epoxy finish to prevent corrosion and a hermetically sealed, oil-filled motor housing that provides great heat dissipation and keeps the pumps running cooler. The non-clogging vortex impeller design reduces the risk of clogging and provides great solids passing capability.

#### APPLICATIONS:

- Specifically designed for lagoon or sump pit applications
- · Farming industry
- Agricultural industry

#### **SPECIFICATIONS:**

- 2" NPT discharge (available with 3" NPT bolt-on flange)
- 1/2 HP through 1 HP
- · Available in automatic or nonautomatic
- 1-1/2" (38 mm) spherical solids capacity with bronze vortex impeller
- Tandem seals with silicon carbide/silicon carbide lower seal and carbon/silicon carbide upper seal

For more information, see Technical Data Sheet FM2812.







# Aeration/Fountain Model 370

This aeration and fountain pump adds a unique focal point and value to your property. The environmentally friendly, water-cooled motor eliminates pollution risk and pond contamination. The continuous-duty pump operates in 5' (1.5 m) or more of water and aerates up to 4,900 gallons (22,276 L) per hour. It produces a water fountain up to 15' (5 m) in height, and it includes three easily interchangeable patterns. The flotation system incorporates a UV-resistant, polyethylene float and eye-bolts for anchoring.

#### **APPLICATIONS:**

- Golf courses
- Subdivisions
- Office parks
- Reduces mosquitoes
- Helps eliminate stagnant water

#### **SPECIFICATIONS:**

· Preassembled with 100' (30 m) GFCI protected power cord

For more information, see Technical Data Sheet FM2813.











## SmartPak® Plus

## 10-0804 Residential Alternator System

Alternates two automatic pumps up to 1/2 HP, 12 amps each, 115 V, single phase (not to be used with with any model grinder pump)

#### SPECIFICATIONS:

- Extends pump life
- · Compact design easily mounts in confined spaces
- · Circuit fault protection
- Specially designed for humid areas
- Universal connection for alarm switch replacement
- Auxiliary output contacts (normally open) for remote alarm connection
- Solid green LED lights for Pump 1, Pump 2 and Power
- Flashing red LED lights for alarm conditions
- 9' (2.7 m) power cord
- Multiple alarm modes will alert user to potential problems and protect property by switching to the other pump when necessary Alarms include:
  - . High water
  - 。Loss of power
  - 。Continuous pump run
  - 。Breaker tripped
  - 。Pump failure
- Button for Silence and Reset
- Built-in, rechargeable battery will operate the alarm and LED lights for a limited time during power outage



Note: Not to be used with any model grinder pump.



# **ZControl® Gateway**

#### 90002-0001

Use the Wi-Fi Gateway to connect your Zoeller product (Pivot Pro and LPS control panels) to the Z Control © Cloud in just a few simple steps. Connecting to the Cloud allows the user to gain remote access to control and manage devices and to receive email, text, and push alert notifications and reminders.

#### SPECIFICATIONS:

- Simple set-up
- Automatically pairs with connected device
- Compact design (3.5" x 2.5" x 1")
- · Lower cost than previous model
- Free standard access. No additional charge or subscription needed for standard Z Control ® account access
- Includes 3' Cat5 cable and hook and loop fasteners for mounting
- Nema 1 enclosure (for indoor use only)





Download the app. Search your app store for "Z Control".







## Electrical Alternator Control Panels

## Pivot® 1Ph Control Panel

#### **Text Key:**

Features common with our previous model

Additional STANDARD features on Pivot®

Pivot®: 115/200/230

Simplex and Duplex models

Limited 5 year warranty



Touch-safe user interface LED indicators:

- -System Ready
- -Float switch LED indicators
- -float switch faults
- -Pump Run LED indicator(s)

Latching globe and horn feature

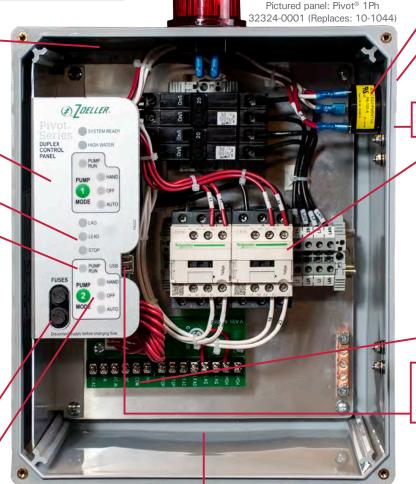
3 or 4 float switch operation

- -choice of multiple float logic and orders
- -built in switch redundancy
- -configurable float switch operation
- -choose between Smart and Relay Switch Logic

Separate fuses for alarm and control circuits

#### Smart HOA:

- -prevents accidental On or Off
- -Off mode reminder



Ample room for field wiring

Top mount globe -varying globe patterns for distinct alarm conditions

Side mount horn

Side mount Test/Silence switch

Test switch tests all LEDs, globe, and horn

NEMA 4X enclosure, locking hasp, dead front.  $12x10x6 \ Pivot^{TM}$ 

Motor contactor(s), breakers (1Ph) -staggered pump start

Alarms for:

- -high water alarm
- -continuous pump run -incorrect control voltage
- -disabled alarm circuit
- -failed contactor -overload
- -float fault
- -HOA Off timeout

Auxiliary output, form C (aka dry contacts)

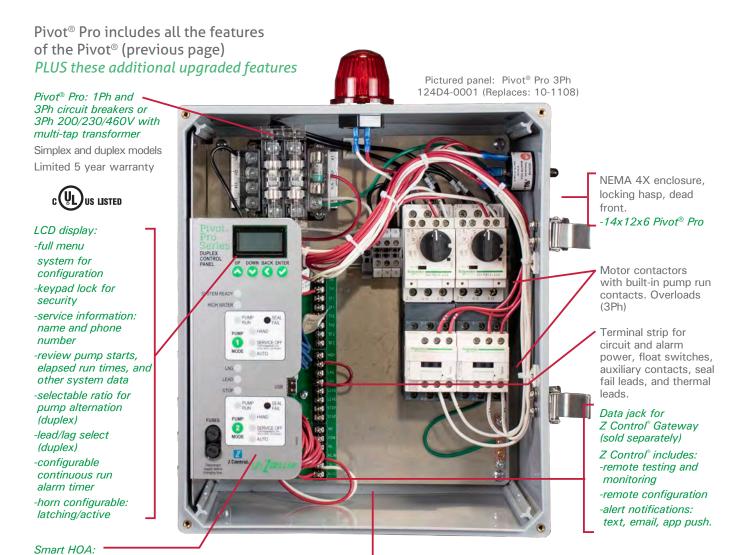
USB features:
-pump starts counter
-elapsed time meter
-custom configurations
-update firmware

Factory Reset for clearing and troubleshooting Set of 5 PCB jumpers for selection of preferences





## Pivot® Pro 1Ph and 3Ph Control Panels



-prevents accidental pump damage -reminder to return to Auto operation

-adjustable behaviors

Ample room for field wiring



# APak® Alarm Systems

The APak® alarm is compact and easy to install. It is CSA approved in a NEMA 1 enclosure. Battery life is over 1 year from 2 AA batteries. Alarm may be used as AC only, DC only, or AC/DC applications. The APak® alarm system sounds a horn when a potentially threatening liquid level condition occurs. The horn can be silenced, but the alarm light remains on until the condition is remedied.

A green "POWER ON" light indicates 120 V primary power to the alarm. A low battery chirp feature indicates when the battery should be replaced. A red "ALARM" light indicates a high-level condition.

NOTE: It is always recommended to power the alarm from a separate circuit than the pump to avoid losing power to both during a tripped breaker scenario.

## 10-4012 Apak® Alarm

#### SPECIFICATIONS:

- NEMA 1 enclosure (INDOOR USE ONLY)
- Automatic alarm reset
- Horn is rated 87 decibels at 10' (3 m)
- 2 AA battery backup (battery not included)
- 15' (5 m) alarm (12 V) tethered switch
- 6' (2 m) power cord
- Auxiliary dry contacts (use 10-4014)

## 10-4011 Apak® Alarm

#### SPECIFICATIONS:

Same standard features of our 10-4012 with:

- 15' (5 m) alarm reed switch
- Auxiliary dry contacts (use 10-4013)





## Z Control® Enabled Models 10-4013 and 10-4014 Apak® Indoor Alarms

#### SPECIFICATIONS:

- Z Control Enabled
  - Wi-Fi® equipped
  - Receive free text, email, and push alerts on:
    - Power outage
    - Low battery
    - Input 1 or 2 triggers
    - Loss of contact with Z Control®
  - Remotely silence, reset alarm.
  - Free Z Control App and Web interfaces
  - Free Z Control account
  - No monthly cost
  - Simple setup
  - Z Control connectivity LED

- 10-4013 comes with reed sensor
- 10-4014 comes with mechanical float switch
- 10-4683 comes with no switch
- All the standard features plus:
- 2nd input for additional monitoring ability
- Dry contacts for connection to home security system, etc.





## 91104-0001 Apak® Outdoor Alarm

#### **SPECIFICATIONS:**

- · APak Outdoor Alarm System Features
- NEMA 4X Outdoor use per UL 864 for US and Canada
- Alarm system (horn & light) operates to warn of a high-water condition
- Horn is rated 82 decibels at 10' (3 m)
- Auxiliary dry contacts for high level alarm, 5 Amps
- Operates on separate circuit from pump, 115 VAC
- Alarm test and horn silence switch with automatic reset
- Terminal connections for a pump and float switch (Model 91104-0001)
- Can be used with liquids to 140 °F (60 °C)
- 15' (5 m) float switch (Model 91104-0001)
- 20' (6 m) float switch, 6' (2 m) power cord, watertight cord connectors (Model 10-0682)
- 3 year limited warranty (Model 10-2614, 10-0682, 91104-0001)

NOTE: All variable level float switches in this section are mechanically activated and do not contain mercury.

## 91104-0002 Apak® Outdoor Alarm

#### SPECIFICATIONS:

Same standard features of our 91104-0001 with:

- 20' (6 m) alarm (12 V) tethered switch
- 6' (2 m), 115 V power cord with water-tight cord connectors



Tested to UL Standard UL 508 & Certified to CSA Standard C22 2 No 205

## Flood Alert®

## 10-0763 High Water Alarm

- Dishwashers or washing machines Laundry sinks
- Air conditioning pans Bath tubs or hot tubs

## **SPECIFICATIONS:**

- · Operates on (3) AAA batteries
- Low battery alarm
- Warns you when sensor contacts water
- Loud intermittent horn rated at 103 +/- 3 db at 1' (30 cm)
- On/Off silence switch
- Stainless steel sensor contacts
- · Easy to install, portable and safe!
- Compact design (3-1/4" x 2-1/4" [8.3 x 5.7 cm])
- No adjustments needed
- Solid state electronic components
- 5' (1.5 m) of lead wire
- 12-month limited warranty
- AC power adapter capability. Requires Class 2 transformer, Input: 120 VAC/60 Hz, output: 4.5 VDC/150 mA, tip positive, type B plug. (Not included, but available at most electronics stores)

Flexible sensor wire allows this alert to be used in many applications. Alerts you of overflowing:

• Sump pump • Toilets • Broken pipes



utdoor



# Variable Level Control Switches

#### APPLICATIONS:

- · Simplex or duplex pump control and high level alarm on electrical alternating control panel systems
- · For dewatering, effluent and sewage applications
- Switch for APak®

#### **SPECIFICATIONS:**

- Float is constructed of durable PVC/polypropylene
- Standard mechanical variable level control switches are rated for 115/230 V, 5 Amps
- Low-current, mechanical variable level control switches are rated for 125 VAC/30 VDC, 0.1 Amps
- 18/2 Type SJOW CPE cord standard
- Cords are available in 15-25-35-50' (5-8-11-15 m) lengths
- Temperature rating of 140 °F (60 °C)
- Approximately 1.5" (38 mm) liquid level differential in switching action

ADJUSTABLE WEIGHT: provides an accurate pivot point for suspended float switches.

- · Gripping teeth on clip and weight channel securely lock float cable into place
- · Cable weight can be adjusted without the use of tools

HOUSING: 1lb 12oz. (0.8 kg), 2.8" x 3.3" (7.1 x 8.4 cm), impact-resistant and non-corrodible, PVC housing for liquids up to 140 °F (60 °C)

CLIP: injection-molded acetal plastic

WIRE/CABLE ACCOMODATED: SJOW, SJTW, 18/2, 18/3, 16/3, 14/2, 14/3

SHIP WEIGHT: 2 lbs. (0.9 kg)

FLOAT SWITCHES								
Ме	chanical	Cord	Mounting					
Standard P/N*	Low Current P/N**	Length (ft/m)	Mounting Method					
10-0743	10-2060	15/5	Clamp					
10-0744	10-2061	20/6	Clamp					
10-1877	10-2062	25/8	Clamp					
10-1878	10-2063	35/11	Clamp					
10-1879	10-2064	50/15	Clamp					
10-1880	10-2065	15/5	Adjustable Weight					
10-1881	10-2066	25/8	Adjustable Weight					
10-1882	10-2067	35/11	Adjustable Weight					
10-1883	10-2068	50/15	Adjustable Weight					

FLOAT SWITCH TREES							
Me	chanical	Cord	Mounting				
Standard P/N*	Intrinsically Safe P/N**	Length (ft/m)	Mounting Method				
10-1456	10-1456		Tree Only				
10-1886	10-2069	15/5	(3) 15' (5 m) Floats & Tree				
10-1887	10-2070	15/5	(4) 15' (5 m) Floats & Tree				

<sup>\*</sup> Not for use with intrinsically-safe control systems.

<sup>\*\*</sup> For use with intrinsically-safe control systems only. Products may not be exactly as pictured.







10-1880



10-1886



# Variable Level Float Switches

#### SPECIFICATIONS:

- Converts nonautomatic pump to automatic pump
- Simple installation
- · Adjustable/variable level
- Standard 15' (5 m) and 20' (6 m) SJOW CPE cord with molded plug. 10-0055 and 10-0065 10' (3 m) cord standard
- Float is constructed of durable PVC/polypropylene
- Standard normally open (NO) ("pumps down")
- Optional normally closed (NC) ("pumps up"). Consult factory
- Maximum operating temperature for 10-0748: 120 °F (49 °C). All other switches: 140 °F (60 °C)
- · Float is omnidirectional
- · Includes mounting clamp
- Designed for EFFLUENT, SEWAGE and DEWATERING applications
- · Variable level float switch, for use in 18" (45.7 cm) minimum diameter basins
- 10-0748 25' (8 m) cord standard, no molded plug. Can be used as a control switch to operate an external magnetic or combination starter on three phase pumps
- Vertical piggyback float switch. Ideal for narrow diameter basins. 6.5" (16.5 cm) maximum cycle range
- Use recommendation chart for switch selection

## Single Piggyback Variable Level Float Switch

•	Jiligic i iggybao	K variable Ecvel	I loat owiton
	13 AMP MAXIMUM	15 AMP MAXIMUM	20 AMP MAXIMUM
	Normally Open (NO)	Normally Open (NO)	Normally Open (NO)
	10-0055 - 115 V - 10' (3 m)	10-0032 - 115 V - 15' (5 m)	10-0748 - 115 V/230 V - 25' (8 m)
	10-0034 - 115 V - 15' (5 m)	10-0033 - 230 V - 15' (5 m)	
	10-0035 - 230 V - 15' (5 m)	10-0705 - 115 V - 20' (6 m)	
	10-0063 - 115 V - 20' (6 m)	10-0559 - 230 V - 20' (6 m)	
	10-0706 - 230 V - 20' (6 m)		
	Normally Closed (NC)	Normally Closed (NC)	
	10-0065 - 115 V - 10' (3 m)	10-0064 - 115 V - 15' (5 m)	
	10-0037 - 115 V - 15' (5 m)		
	10-0062 - 230 V - 15' (5 m)		

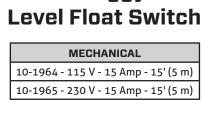


10-0032

Note: All variable level float switches in this section are mechanically activated and do not contain mercury.

Single Piggyback Vertical Float Switch

13 AMP MAXIMUM NORMALLY OPEN (NO) VERTICAL	
10-2041 - 115 V - 10' (3 m)	
10-2042 - 115 V - 15' (5 m)	
10-2043 - 115 V - 20' (6 m)	



**Double Piggyback Variable** 







# Nema-4X Junction-boxes

## **Economy Junction Box (Field Assembled)**

PVC plastic box with removable cover for use in sewage, effluent, dewatering, or corrosive environments. Box is  $4'' \times 4'' \times 2''$  (10 x 10 x 5 cm) and is field-drilled for maximum flexibility in each installation.



10-0331 shown.

## **Sewage/Waste Junction Boxes**

NEMA-4X Junction Boxes are electrical enclosures that are watertight, dust-tight, and corrosion resistant. Boxes are completely assembled with cord seals and terminal strip for easy field wiring.



10-1399 shown



10-1403 shown

## **Deluxe Junction Box(Factory Assembled)**

High-impact, corrosion-resistant, weather proof thermoplastic enclosure with flexible PVC gasket and brass screws. Preassembled at the factory for convenience and ease of installation.

## **Qwik- Box Pump Control and Alarm**

The Qwik-Box is a junction box designed for easy hookup of pumps and alarm systems. It is used in septic effluent, sewage, or dewatering applications, and requires a connection outside the building or residence. The Qwik-Box eliminates the need for junction wiring boxes inside sewage and septic tanks, and consists of UL listed components.

#### **SPECIFICATIONS:**

- · No need to cut off plugs
- · Sealed watertight enclosure
- Available in 115 Volt or 230 Volt design
- · Corrosion-resistant PVC construction
- Easy hookup of indoor alarm with terminal strip exposed for low voltage wiring
- Rated for NEMA 4X
- Water-tight rubber cord seal for pump and switch cables
- Optional indoor tank alert alarm with silence switch and LED indicator
- · Installation and wiring instructions included
- Meets NEC requirements for a disconnect See FM1420 for further information.

## **Starter Kits**

A starter kit is required for all single phase model 611, 621, 631, 641, and 651 pumps. A starter kit consists of the single phase capacitors and relay required to run the pump. These components are shipped loose and are installed into the pump's control panel.







# Disconnect & Rail Systems

## Z-Rail<sup>®</sup> Threaded Rail Systems 1-1/4" - 3" NPT Discharge Pumps

#### SPECIFICATIONS:

- · Sewage, storm water, effluent and grinder pump systems
- · For use in concrete, steel, or fiberglass tanks
- Allows for removal of pumps from ground level
- No confined space entry to service pump
- · No pull rods or hold down rods
- · Disconnect fitting with positive machine fit and o-ring provides a reliable seal
- Seals up to 370' TDH (160 psi) and supports a weight up to 300 lbs
- Guide rails direct the pump to and from the disconnect fitting. Systems are supplied complete with disconnect fitting, guide plate, rail guide, and upper rail support bracket
- All systems use 3/4" schedule 40 pipe rails (not included)



2" Z-Rail® unit shown.

## 3" & 4" Flanged Rail Systems Horizontal Discharge

#### **SPECIFICATIONS:**

- For 600 and X600 Series solids-handling pumps
- · For basins of any depth
- · Cast iron construction with stainless steel hardware
- · Easy engagement and disengagement of pump from ground level
- Suitable for most horizontal discharge pumps having a 3" or 4" ANSI flange
- Seals up to 100' TDH (43.9 psi) and supports a weight up to 500 lbs
- Includes base elbow, pump adaptor plate, sealing gasket, rail guide and upper rail support
- All systems use 2" schedule 40 rail pipes (not included)



4" Non-sparking unit shown.

## **EZ Pull Quick Disconnect**



The EZ-Pull quick disconnect is a convenient accessory to use when installing or removing a pump from a tank.

#### **FEATURES**

- Two-piece tapered male and female connection that locks itself into place when sliding the two pieces together
- Injection molded, glass filled thermoplastic with an o-ring which provides a watertight seal even under high head conditions
- Available in 1-1/4", 1-1/2" and 2" FPT

## Disconnect Only 1-1/4" - 2" Discharge



#### SPECIFICATIONS:

- · Brass or thermoplastic
- Economical, reduces time and cost of removing pump
- Safety: keeps personnel out of pits & out of contact with contaminants
- Used for shallow systems where guide rails are not necessary (pull rod not included)



# Check, Ball, & Plug Valves

**Full-Flow Unichecks** 30-0152 / 30-0160 30-0163 / 30-0164 1-1/4" - 3" Cast Iron

#### SPECIFICATIONS:

- Vertical or horizontal installation
- Full-flow design, no restrictions
- Standard, 1-1/4", 1-1/2", 2", 3" female NPT
- Neoprene polyester, reinforced flapper, smooth edge design, with cast iron and non-corrosive metal backing plates and stainless steel fastener
- Corrosion-resistant, powder coated epoxy finish
- Rated at 50 PSI (115' [35 m] of head) at 130 °F (54 °C)
- Stainless steel bolts

## **Full-Flow** Unichecks 30-0181 / 30-0200 1-1/4" - 1-1/2" Slip x Slip Union

#### SPECIFICATIONS:

- Flapper bends over a radius, no sharp 90° edges — lengthens life of flapper hinge
- PVC plastic check body, ultrasonically welded and can be solvent-welded for rigid, pressure-rated piping systems to 25 PSI, (57' [17.4 m] of head) at 130 °F (54 °C) (30-0182)
- Vertical or horizontal installation
- Available in individual packages for pegboard display (30-0191)
- All stainless steel screws, nuts and clamps on model 30-0200 only
- Slip x slip for 4.3 PSI, 10' (3 m) of head at  $130 \,^{\circ}$ F (54  $^{\circ}$ C). Avoid more than 10' (3 m) static head above the check valve.



## 30-0021 / 30-0151 2" Plastic or Cast **Iron Slip Union**

## SPECIFICATIONS:

- Full 2" flow design meets BOCA (P.604.2) 2" full flow pump code
- Simple to install (no threading of pipe required). Save time and material costs
- Neoprene gasket and flapper, weighted with heavy stainless steel metal backing plates and rivet
- Vertical or horizontal installation
- Slips over ABS, PVC, steel or copper pipe
- Flexible neoprene slip x slip union includes stainless steel clamps for low pressure systems. Avoid more than 10' (3 m) static head above the check valve. 4.3 PSI at 130 °F (54 °C)
- Plastic check has PVC body and can be installed with solventwelded couplings for pressure systems to 25 PSI, 57' (17.4 m) of head (30-0023)
- Model 30-0151 has corrosion-resistant, powder coated epoxy finish
- Stainless steel sleeves available to meet Illinois Plumbing Code. (Cast Iron 30-0201 / PVC 30-0202)
- Meets requirements of Wisconsin Uniform Plumbing Code



- Use with 2000 and 3000 series hightemperature pumps
- Vertical or horizontal installation
- Full-flow design, no restrictions
- Standard 1-1/4", 1-1/2", 2" female NPT
- EPDM strand-reinforced flapper, smoothedge design with cast iron and non-corrosive metal backing plates & stainless steel fastener
- Corrosion-resistant, powder coated epoxy finish
- Rated at 50 PSI (115' [35 m] of head) at 200 °F (93 °C)
- Stainless steel bolts







# Tri-Check® 30-0100 / 30-0101 1-1/2" - 2" PVC Check Valve/Ball Valve Union Combination

#### SPECIFICATIONS:

- · Full-flow check valve design
- Threaded union allows pump to be removed without disrupting discharge piping
- Saves time and money easy to install
- Neoprene gasket and flapper, weighted with stainless steel backing plates and rivet
- · Can be installed on vertical or horizontal pipe
- Meets plumbing codes requiring a ball valve installed in conjunction with a check valve

## The Combo 30-0102 / 30-0103 1-1/2 " - 2" PVC Check Valve Union Combination



- All stainless steel screws
- Replaceable flapper in the check valve
- Extra wide hinge to reduce stress
- Rated for 25 psi, 57' (17.4 m) of head



## **Quiet Check - PVC Solvent Weld with Union Check Valve**



г	/14	30	-004	•
	<b>\</b> \/\	nite	P\/C	

Clear PVC

P/N 30-0046 White PVC

P/N 30-242 Clear PVC

## SPECIFICATIONS:

- 1/2 lb. (0.23 kg) spring eliminates water hammer
- Reduces motor and pump noise
- Designed for both horizontal and vertical usage
- Full-flow, non-clog design installation
- Durable PVC check body and compression end fittings
- · Solvent-weld ends allow for easy installation
- 30-0044 and 30-0045 have no unions
- No threading of pipe required saves time and money
- Pressure rated at 50 PSI (115' [35 m])
   30-0241 & 30-0242 Slip Union: 40 PSI (92' [28 m])
   30-0243 & 30-0244 Slip Union: 30 PSI (69' [21 m])
- Consult factory for use over 130 °F (54 °C)
- Suitable for installation below basin cover

P/N	SERVICE PART
152294	1-1/2" union assembly
152293	2.0" union assembly

QUIET CHECKS PVC SOLVENT WELD							
Item Number	Pipe size	Valve Body	Weight (lbs/kg)	Length (in/mm)	Carton Qty		
30-0239	1-1/4"	White	0.75 lbs/0.3 kg	9.50"/241 mm	12		
30-0040	1-1/2"	White	2 lbs/0.9 kg	9.50"/241 mm	12		
30-0041	1-1/2"	Clear	2 lbs/0.9 kg	9.50"/241 mm	12		
30-0042	2"	White	3 lbs/1.4 kg	10.50"/267 mm	12		
30-0043	2"	Clear	3 lbs/1.4 kg	10.50"/267 mm	12		
30-0044	3"	White*	3 lbs/1.4 kg	9.50"/241 mm	8		
30-0045	3"	Clear*	3 lbs/1.4 kg	9.50"/241 mm	8		
	Q	UIET CH	IECKS PVC SLIF	PUNION			
30-0241	1-1/2"	White	1.2 lbs/0.5 kg	10.50"/267 mm	12		
30-0242	1-1/2"	Clear	1.2 lbs/0.5 kg	10.50"/267 mm	12		
30-0243	2"	White	1.8 lbs/0.8 kg	11.50"/292 mm	12		
30-0244	2"	Clear	1.8 lbs/0.8 kg	11.50"/292 mm	12		
QUI	ET CHE	CKS WIT	H QUARTER TU	JRN BALL VALVE	S		
30-0046	1-1/2"	White	3 lbs/1.4 kg	14.75"/375 mm	12		
30-0047	1-1/2"	Clear*	3 lbs/1.4 kg	14.75"/375 mm	12		
30-0048	2"	White	4 lbs/1.8 kg	16.12"/409 mm	12		
30-0049	2"	Clear*	4 lbs/1.8 kg	16.12"/409 mm	12		
*Solvent weld only. No unions included (see chart)							

<sup>\*</sup>Solvent weld only. No unions included (see chart).

**GENERAL CAUTION:** Water hammer creates momentary high pressure surges. These surges can cause severe damage to check valves and the piping system. Consideration for water hammer must be included in the piping system design. Reference ASPE Data Book, Chapter 2.33. May require check valves with special non-slam features or other engineered solutions.



## Compression 1-1/2" - 3" Compression Unichecks



ITEM NO.	PIPE SIZE	WEIGHT (lbs/kg)	LENGTH (in/mm)	CARTON QTY	
30-0015	1-1/2"	1.1 lbs/0.5 kg	7-1/2"/180 mm	12	
30-0020	2"	1.7 lbs/0.8 kg	9-3/4"/248 mm	12	
30-0030	3"	5 lbs/2.3 kg	14"/356 mm	2	

Pressure rated to 125 psi (861 kPa) at 285' (86.9 m] at 75 °F (24 °C)

## Inline 30-0238 Inline Check Valve

#### SPECIFICATIONS:

- Rubber coupling with stainless steel clamps
- Threads into pump discharge
- Pre-drilled weephole
- 4.3 PSI, 10' (3 m) of head max
- Vertical installation only



## 3" & 4" Flanged Check Valves

#### SPECIFICATIONS:

- Heavy-duty ductile iron construction
- · Angled seal for non-slam closure
- · Non-clog design
- Reinforced disc
- · Drip-tight seating
- Rated up to 250 PSIG
- · Designed for both horizontal and vertical usage
- Optional backflow actuator and mechanical indicator



## 3" & 4" Cast Iron Plug Valves

## SPECIFICATIONS:

- Designed to handle solids-bearing flows
- Cast iron housing rated 175 psi
- 99% pure nickel welded seat
- 1/4 turn Buna plug
- Upper and lower ball bearings
- Provided with hand lever\*

<sup>\*</sup>Hand lever not shown in photos



PART NO.	VALVE SIZE		"B" (in/mm)	"C" (in/mm)	"D" (in/mm)	"E" (in/mm)	"F" (in/mm)	"G" (in/mm)	"H" (in/mm)	WEIGHT (lbs/kg)
6030-0197	2-1/2"		5-1/2"/ 139.7 mm	7"/ 177.8 mm	11/16"/ 17.5 mm	1-1/2"/ 63.5 mm	3-3/8"/ 85.7 mm	5/8"/ 15.9 mm	4"/ 101.6 mm	32 lbs/ 14.5 kg
6030-0202		9-1/2"/ 241.3 mm	6"/ 152.4 mm	7-1/2"/ 196.5 mm	3/4"/ 19.1 mm	3"/ 76.2 mm	5-1/8"/ 130.2 mm	5/8"/ 15.9 mm	4"/ 101.6 mm	37 lbs/ 16.8 kg
6030-0203	4"	11-1/2"/ 292.1 mm	7-1/2"/ 190.5 mm	9"/ 228.6 mm	15/16"/ 23/9 mm	4"/ 101.6 mm	5-3/4"/ 146.1 mm	5/8"/ 15.9 mm	8"/ 203.2 mm	63 lbs/ 28.6 kg

	FLANGED MODELS								
SIZE	PART NO.	WIDTH (in/mm)	HEIGHT (in/mm)	WEIGHT (lbs/kg)					
3"	6030-0085	8"/ 203.2 mm	14-1/8"/ 358.8 mm	53 lbs/24.0 kg					
4"	6030-0086	9"/ 228.6 mm	16-3/4"/ 425.5 mm	66 lbs/29.9 kg					

**GENERAL CAUTION:** Water hammer creates momentary high pressure surges. These surges can cause severe damage to check valves and the piping system. Consideration for water hammer must be included in the piping system design. Reference ASPE Data Book, Chapter 2.33. May require check valves with special non-slam features or other engineered solutions.



# CITY WATER BOOSTER PUMPS

All-in-one unit, consisting of pump, motor, stainless steel pressure tank and electronic controller. Compact design and quiet operation make it suitable for many applications. System has automatic built-in diagnostics to protect against:

- Run Dry
- Dead Head
- · Rapid Cycling

#### **SPECIFICATIONS:**

- Impeller constructed of stainless steel with stainless steel bearing and shaft sleeve
- 1 in. stainless steel inlet and outlet flanges
- 1/2 and 1 HP models , 115V
- Pressures to 112 PSI
- · Flow rates to 27 GPM
- · Variable pressure based on demand





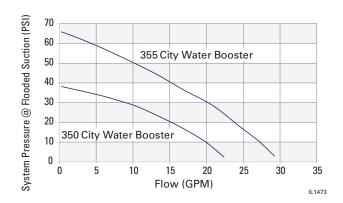
## **PERFORMANCE DATA**

#### DO NOT EXCEED 30 PSI INCOMING PRESSURE

Inlet PSI	Model 350 System Pressure (PSI) at Flow Rates (GPM)							
	3	6	9	12	15	18	21	
10	43	36	35	31	26	-	-	
20	53	46	45	41	36	-	-	1/2
30	63	56	55	51	46	-	-	

#### DO NOT EXCEED 50 PSI INCOMING PRESSURE

Inlet	Model 355 System Pressure (PSI) at Flow Rates (GPM)							HP
PSI	3	6	9	12	15	18	21	
10	72	67	61	56	50	45	39	
20	82	77	71	66	60	55	49	
30	92	87	81	76	70	65	59	1
40	102	97	91	86	80	75	69	
50	112	107	101	96	90	85	79	





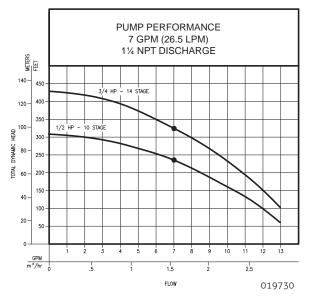
# 4" Submersible

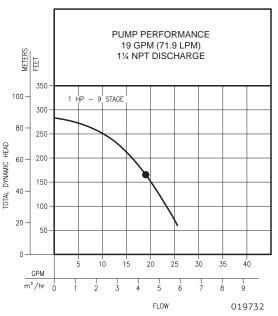
## Stainless steel/cast iron

Submersible pumps are rated by the number of gallons per minute to the well head from various water level depths. Models rated at 7 GPM (26.5 LPM) are for small homes, cottages and light water usage demands, whereas the 11 GPM models are for the average residential size home and family.

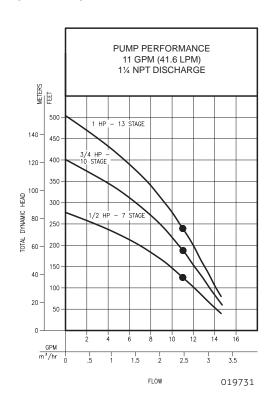
1/2 thru 1 HP F&W motors used on Zoeller submersible pumps are designed to meet NEMA standards. 1/2 HP models are available in either 115 or 230 volt. The 3/4 and 1 HP models are available in 230 volt only. All models are available with either a 2 or 3 wire connection plus ground wire. 3 wire models require a control box.

#### PERFORMANCE DATA









Product may not be exactly as shown.



# Lawn Sprinkler / Irrigation Pump

Zoeller Pump Company's self-priming Lawn Sprinkler Pump. The unique design allows for proper lawn sprinkling saturation in areas where water pressure is inadequate or not available. Quality features include a heavy duty motor ranging from 3/4 HP to 2 HP, a large volume pump housing that ensures quick and easy self-priming operation, mechanical seal and an air volume control connection. With a versatile and compact design to fit in tight places, these lawn sprinkler pumps can be field wired for 115V or 230V applications. This pump comes preassembled and ready for installation.



#### **APPLICATIONS:**

- Underground sprinkling
- Filling stock tanks
- Above ground sprinkling
- Garden irrigation
- Transferring water

#### SPECIFICATIONS:

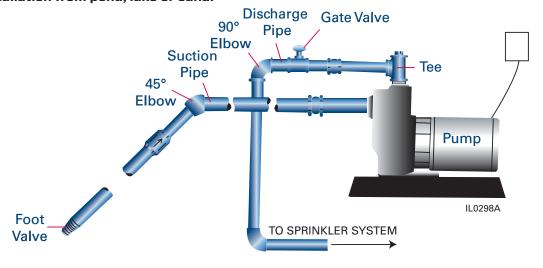
- Provides up to 88 GPM (333 LPM) for moving large volumes of water quickly.
- Quick self-priming characteristics. Must initially be primed with water.
- Heavy duty 56 frame, NEMA J, capacitor start, double ball bearing motor for continuous operation.
- Normal wear parts are easily removed for service and replacement without disturbing the suction or discharge piping.
- · Heavy duty rugged construction.

MODEL NUMBER		SUCTION	CAPACITY - GPM DISCHARGE PRESSURE PSI				ı	SHUT-OFF PRESSURE	SUCTION PIPE	DISCHARGE	SHIP WT.			
1 Phase	HP	LIFT FT.	10	15	20	25	30	35	40	45	PSI	TAP	TAP	(LB)
		5	56	48	42	37	29	21			41			
330-0006	3/4	15	47	42	37	29	22	12			37	2"	1-1/2"	63
		25	43	37	31	22	10				33			
		5	58	53	48	43	38	32	23	11	48			
331-0006	1	15	53	48	45	37	31	24	12		43	2"	1-1/2"	70
		25	48	44	38	33	25	14			39			
		5	78	77	74	70	62	53	43	30	47			
332-0006	1-1/2	15	70	68	66	62	53	43	30		41	2"	1-1/2"	73
		25	47	46	45	44	42	34			36			
		5	86	84	81	77	71	62	52	40	50			
333-0006	2	15	76	74	72	69	64	55	43	25	45	2"	1-1/2"	79
		25	52	51	50	47	45	42	30		40			

All motors are dual voltage. Single Phase (115/230V), Three Phase (208-230/460V)

Maximum case pressure; 100 PSI

## Typical installation from pond, lake or canal







# **End Suction** Centrifugal Pumps **Single Stage End Suction**

#### **SPECIFICATIONS**

- Heavy duty 56 frame, NEMA J, capacitor start, double ball bearing motors for continuous operation.
- Rugged volute type casing. Discharge can be rotated to any one of four positions for horizontal or vertical service line.
- Normal wearing parts are easily removed for service and replacement without disturbing the suction or discharge piping.





## **CENTRIFUGAL PUMPS, PLASTIC IMPELLERS**

MODEL NO.			CAPACITY GPM								MAX.	MAX.	MAX.	
1 PHASE	HP	STAGES	SUCTION LIFT FT.	D	ISCHA	RGE	PRES	SSUR	ı	PRESS.	CASE	LIQUID		
IPHASE			LIFI FI.	10	15	20	25	30	35	40	PSI	PRESS.	TEMP.	
			5	42	34	21								
300-0006	1/3	1	15	36	26						27	100psig	200° F	
			25	28										
			5	50	47	37	25					100psig		
301-0006	1/2	1	15	43	40	29	9				32		200° F	
			25	33	30	15								
	3/4		5	71	62	51	36	11						
302-0006		1	15	66	54	40	19				38	100psig	200° F	
			25	57	43	25								
	1	1	5	76	69	61	50	36	16					
303-0006			15	73	65	54	41	24			40	100psig	200° F	
			25	66	57	45	29							
			5	94	88	80	70	59	44	18				
304-0006	1 1/2	1	15	92	85	75	63	49	27		44	100psig	200° F	
	1/2		25	74	72	66	52	34						
		1	5	109	103	96	86	75	61	39				
305-0006	2		15	109	103	94	82	67	45		44	100psig	200° F	
			25	90	89	85	71	51						

Do not exceed the maximum case pressure and maximum liquid temperature rating of the pump Suction and Discharge Tappings 1-1/2" X 1-1/4"

## **Two Stage End Suction**

## **SPECIFICATIONS**

- 56 frame, NEMA J, capacitor start, double ball bearing motor for continuous operation.
- 3/4, 1, 1-1/2, and 2 HP sizes with single phase motor.
- Rugged cast iron pump casing. Multi stage for high head.
- Normal wearing parts are easily removed for service and replacement without disturbing the suction or discharge piping.
- Thermoplastic impeller.



300-0006

306-0006

MODEL NO.			CHOTION				CAPA	CITY	MAX.	MAX.	MAX.												
1 PHASE	HP	STAGES	SUCTION LIFT FT.		D	ISCH	ARGI	E PRE	SSU	RE P	SI		PRESS.	CASE	LIQUID								
IPHASE			LII 1 1 1.	10	20	30	40	50	60	70	80	90	PSI	PRESS.	TEMP.								
NETOC			5	41	35	28	20							160psig									
NE306 306-0006	3/4	2	15	38	32	26	13						49		160° F								
300-0000			25	32	29	22																	
NEZOZ	1	2	5	45	40	35	28	20						160psig									
NE307 307-0006			15	42	39	33	26	15					60		160° F								
307-0000			25	35	33	30	22																
NEZOO		2	5	54	50	44	38	28															
NE308 308-0006	1-1/2		15	48	46	42	35	23					61	160psig	160° F								
300 0000			25	37	35	33	28	17															
NEZOO		2 2	5	55	52	47	41	34	23														
NE309 309-0006	2		2	2	2	2	2	2	2	2	15	49	47	45	39	30	17				67	160psig	160° F
309-0006			25	37	36	33	32	26															

Note: Do not exceed the maximum case pressure and maximum liquid temperature rating of the pump Suction and Discharge Tappings 1-1/2" X 1-1/4".



# **Jet Pumps**

## **Cast Iron Shallow Well Jet Pumps**

NE460 - 1/2 HP 115/230 V NE461 - 3/4 HP 115/230 V

#### **SPECIFICATIONS**

- Sturdy cast iron construction.
- Includes removable ejector for easy serviceability.
- Includes pressure switch.
- Thermal overload protects against overheating.
- Special priming port and large volume case makes priming easier.
- Continuous duty uni-frame 56 frame motor (NEMA J adaptable).
- Capacitor start motor provides maximum starting torque.
- Stainless steel motor shaft sleeve for corrosion resistance.
- Easy access drain plug for winterizing.
- Carbon/silicon mechanical shaft seal.





Factory preset high quality pressure switch with spade connectors for easy wiring.

Motor bracket designed to accept motors manufactured to 56 Frame NEMA specifications. (NEMA - National **Electrical Manufactures** Association)

Zinc clad heavy steel motor shell and cooling fan resist corrosion and provide full airflow and heat dissipation.

> Quick entry motor compartment for easy access to switch mechanism, electrical components and wire terminals. Dust cover protects switch and electrical components from dust, dirt and insects.

Spade connectors for quick wiring and voltage change.

Thermal overload automatically senses excessive motor heat for complete winding protection.

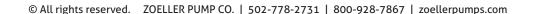
Large diameter molded impeller and diffuser with ultra-smooth water passages for maximum performance. Corrosion and abrasion resistant.

High tensile close grain pump case for superior durability and strength. Large water cavity and separate priming port enables quick pump priming.

> Stainless steel motor shaft sleeve eliminates rusting and pitting of the motor shaft at the seal area and prolongs pump and seal life.

Permanently lubricated ball bearings on both motor ends for excellent rotor alignment, smooth quiet operation and long bearing life.

100% nylon over coated magnet wire with an additional varnish dip to guard against moisture penetration and insulation breakdown.





## Cast Iron Convertible Jet Pumps With Power Plus 56 Frame Motor

NE462 - 1/2 HP 115/230 V 1-1/4" inlet, 3/4" discharge

NE463 - 1 HP 115/230 V 1-1/4" inlet, 1" discharge

#### **SPECIFICATIONS**

- Sturdy cast iron construction.
- Highly serviceable NEMA J or NEMA J adaptable motor.
- · Includes pressure switch.
- · Thermal overload protects against overheating.
- · Ejector purchased separately.





Convertible Jet Pumps with NEMA J adaptable uni-frame motor

MODEL	SUCTION LIFT FT.	PRESSURE SWITCH	CAPA		AT DISCH	SUCTION & DISCHARGE	PUMP SHIPPING			
	LIFT FT.	SETTING PSI	20	30	40	50	DISCHARGE	WEIGHT (LB)		
460-0006	5		11.6	11.0	9.8	7.0				
1/2 HP	15	30-50	9.0	8.8	8.0	5.6	1-1/4" x 3/4"	40		
NE460	25		5.6	5.6	5.5	4.5				
461-0006	5		17.5	17.0	15.0	10.0				
3/4 HP NE461	15	30-50	13.0	12.9	12.5	8.0	1-1/4" x 3/4"	42		
	25		8.0	7.8	7.5	5.5				

## **Shallow And Deep Well Capacities With Convertible Ejectors**

	EJECTOR MODEL		C	CAPACITIES IN GPM FROM PUMP TO PUMPING WATER LEVEL IN FEET													
PUMP MODEL		DISCHARGE PRESSURE PSI	SW EJECTOR ATTACHED TO PUMP			DEEP WELL EJECTOR IN 4" ID WELL										MINIMUM OPERATING	
			5	15	25	20	30	40	50	60	70	80	90	100	110	PRESSURE PSI	
462,0006	10-2353	20 40	11.3 9.5	8.7 7.8	5.3 5.2												
462-0006 1/2 HP NE462	10-2355	20 40	10.2 9.7	8.0 7.3	4.8 4.5	11.7 6.0	8.3 4.7	7.0 3.8								20	
	10-2356	20 40						6.7 4.3	6.0 3.8	5.3 3.3	4.3 2.5	3.3 1.7	2.5 0.8			30	
	10-2357	30 50	15.7 15.0	12.3 12.2	8.3 8.0	16.7 12.5	14.2 8.3	12.2 5.0	8.3 2.5							35-37	
463-0006	10-2355	30 50	10.0 9.5	7.5 7.3	4.7 4.3	11.7 9.2	11.7 9.2	11.5 8.2	10.3 7.0	9.0 5.7	7.7 4.3	6.2 3.2	4.8 1.7			37-39	
1 HP NE463	10-2358	30 50										5.0 3.7	4.8 3.3	4.3 3.0	3.7 2.7	39	
	10-2354	20 40	17.2 14.8	12.8 12.2	7.7 7.2												

 ${\it NOTE: See installation instructions for setting flow control for maximum pressures.}$ 

Reduce your stock keeping units with Zoeller mix and match tank fitting packages

## Add:

- 10-2367 compact Air-E-Tainer®
- 10-2381 fittings package
- Zoeller Shallow Well Jet Pump

And get: Cottage Air-E-Tainer® System



#### Add:

- 10-2368 or 10-2369 vertical bottom connect
- Air-E-Tainer®
- 10-2373 fittings package
- Zoeller Convertible Jet Pump

And get: Top mounted vertical Air-E-Tainer®
Systems bottom connect







## WHAT SETS ZOELLER PUMPS APART?

Since 1939, Zoeller Company has been manufacturing water pumps of many types. From pedestal pumps in the beginning to large HP, submersible, non-clog pumps in recent years, we have gained invaluable manufacturing experience from our humble beginning in August Zoeller's basement workshop.

Over the years, one of our most important mottos has been, 'We excel at 1,000 little things'. From start to finish, we take pride in our products. When you have residential or commercial wastewater issues, you can count on Zoeller to deliver the very best solutions. Our commitment to unsurpassed quality offers years of service and durability with a responsive and knowledgeable product support team just a phone call away.

## MANUFACTURING IS IN OUR BLOOD...

Rather than using a 'puzzle piece' mentality and simply buying components from other sources and assembling them, we manufacture most of our products from start to finish, continually checking the quality throughout the entire process.

Quality is always the most important element at Zoeller. Above all, quality is what has made us successful and continues to drive the decisions we make. A quality product cannot be manufactured with low-grade components. By bringing in high-quality raw castings as well as machining and powder coating the pieces in house, we are able to control the quality of each part and identify any defect throughout the manufacturing process. Each piece is subjected to numerous quality checkpoints along the way to guarantee that it is the best of the best.

#### FACTORY TESTING IS NOT JUST A BUZZWORD...

Instead of running 'audits' on a calculated number of pumps, all submersible Zoeller pumps are 100% factory tested underwater prior to shipment. Each pump is subjected to a leak test to ensure that all gaskets, seals and mating surfaces will hold under pressure. After the pressurized leak test, the pump is powered up and run underwater to ensure that it is capable of the published head capacity and flow rate listed in our catalog and specification sheets. This testing allows us to guarantee the pump will operate out of the box every time, and you can rest assured that YOUR Zoeller pump was tested underwater for both electrical and hydraulic performance.

## • FULL BREADTH OF PRODUCT LINE...

Zoeller is your 'one stop shop' when dealing with dewatering and wastewater systems. We offer everything from a small fractional sump pump to a large, 60 HP, non-clog pump. From battery back-ups, check valves, sewage grinder systems, small prepackaged residential units or large prepackaged municipal systems, Zoeller can offer it all. Next time you are looking for a water or wastewater system, reach for the only catalog you will ever need... Zoeller Company!



## ABOUT THE ZOELLER FAMILY OF WATER SOLUTIONS

Founded in 1939, Zoeller Company is one of the oldest independently-owned professional pump manufacturers in North America. Headquartered in Louisville, Kentucky USA, Zoeller has over 800 employees worldwide and close to 600,000 sq. ft. of manufacturing facilities from our seven operations in North America

Zoeller Company has established itself as an innovative leader in pumping equipment and water treatment systems by continuous research and development. The quality of our products is demonstrated by UL, CSA, CE, and NSF listings as well as continued growth throughout the United States, Canada, Mexico, and over 40 other countries around the globe. The company has also expanded to include four brands, which have become the foundation of Zoeller.



The original Zoeller product line now resides in Zoeller Pump Company, which offers a broad range of submersible pumps from fractional to 7-1/2 HP for residential and commercial sump, effluent, dewatering and grinding applications.



Flint & Walling, founded in 1866 in Kendallville, Indiana USA, is the only pump company in the U. S. to manufacture its own motor for jet and centrifugal pumps. This product line specializes in deep well pumps that range from 5 GPM to 1,000 GPM, as well as centrifugal, jet, booster, and submersible pumps up to 7-1/2 HP.



Founded in 1952, Wolf Pump is a manufacturer of submersible turbine pumps located in Abernathy, Texas. Wolf currently produces 4" to 8" pumps with capacities ranging from 35 to 1000 GPM. These pumps are known for their efficiency and durability in demanding water applications including irrigation, municipal water supplies, dewatering applications, dairy production, mining, the oil and gas industries, aquaculture, and more.



residential.

Zoeller Engineered Products provides products for storm water removal, sewage pumping stations and hazardous environment applications for commercial and municipal Available from 1/2 BHP to 60 BHP, each pump is customized by design, manufacture and installation according to exact application needs.



Trusted. Tested. Tough.®

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