

# Full Product Catalog

Pumps Controllers Packages Systems Accessories



# Table of Contents

Sump Pumps

Effluent Pumps

Sewage Ejector Pumps

High Head Sewage Ejector Pumps

High Flow Sewage Ejector Pumps

Special Application Pumps

Ion+ Sump Pumps

Ion+ Sewage Ejector Pumps

Controllers

Ion Endeavor Pump Packages

Battery Backup Systems

Accessories

Basin Packages



# WC33i

## Sump Pump

- Basement Sump
- Septic Tank Effluent
- Dewatering

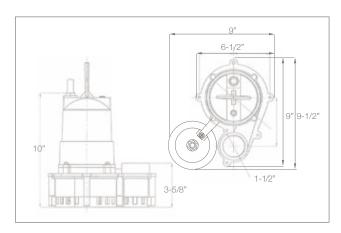


Sump Pumps

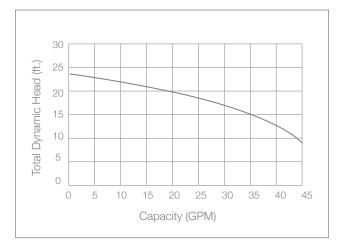
## System Specifications

Typical Applications	Basement sump Dewatering Septic tank effluent
Maximum Capacity	Up to 45 GPM
Maximum Head	Up to 24'
Electrical Data	115 V, 1 Ø, 4 FLA, 60 Hz
Motor Data	1/3 HP, 3450 RPM
Recommended Minimum Basin Size	18" x 24"
Automatic Operation  Manual Operation	i: Ion Digital Level Control (standard) V: Vertical M: Manual
Materials of Construction	Cast iron & engineered thermoplastic
Power Cord	10' Standard
Discharge	1½" NPT
Solids	1/2"

### Pump Dimensions



## Pump Performance



- Carbon ceramic mechanical seal
- Oil-filled high efficiency PSC motor that uses half the AC power of most 1/3 HP pumps
- Piggyback Ion® digital level control switch has no moving parts (standard)
- Size allows 2 pumps in 18" basin
- 3 year warranty





# SH30i

## Sump Pump

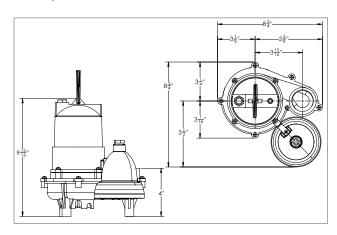
- Basement Sump
- Septic Tank Effluent
- Dewatering



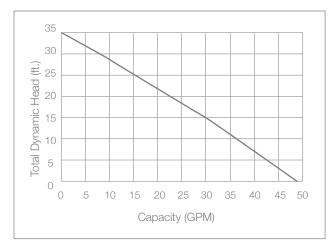
## System Specifications

Typical Applications	<ul><li>Basement sump</li><li>Dewatering</li><li>Septic tank effluent</li></ul>
Maximum Capacity	Up to 47 GPM
Maximum Head	Up to 35'
Electrical Data	115 V, 1 Ø, 7.0 FLA, 60 Hz
Motor Data	3/10 HP, 3450 RPM
Recommended Minimum Basin Size	18" x 24"
Automatic Operation  Manual Operation	i: Ion Digital Level Control (standard) W: Wide angle float V: Vertical float M: Manual
Materials of Construction	Cast iron
Impeller	Cast iron vortex
Power Cord	10' Standard
Discharge Size	1½" NPT
Solids Handling	3/4"

## Pump Dimensions



## Pump Performance



- Carbon ceramic mechanical seal
- Oil-filled motor with automatic reset thermal overload
- Uses single-row ball bearing construction
- Piggy back Ion® digital level control switch has no moving parts (standard)
- 3 year warranty





# SH50i

## Sump Pump

- Basement Sump
- Septic Tank Effluent
- Dewatering

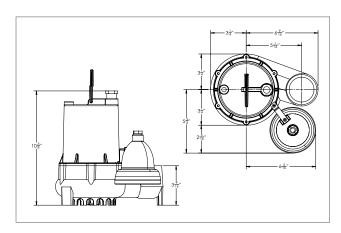




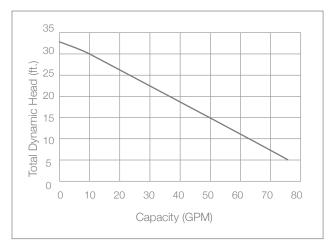
## System Specifications

Typical Applications	Basement sump Dewatering Septic tank effluent
Maximum Capacity	Up to 74 GPM
Maximum Head	Up to 33'
Electrical Data	115 V, 1 Ø, 8.5 FLA, 60 Hz
Motor Data	1/2 HP, 3450 RPM
Recommended Minimum Basin Size	18" x 24"
Automatic Operation  Manual Operation	i: Ion Digital Level Control (standard) W: Wide angle float V: Vertical float M: Manual
Materials of Construction	Cast iron
Impeller	Non-clog vortex
Power Cord	20' Standard
Discharge Size	2" NPT
Solids Handling	3/4"

## Pump Dimensions



## Pump Performance



- Carbon ceramic mechanical seal
- Oil-filled motor with automatic reset thermal overload
- Uses single-row ball bearing construction
- Piggy back Ion® digital level control switch has no moving parts (standard)
- 3 year warranty



# BA33i

## Sump Pump

- Basement Sump
- Dewatering

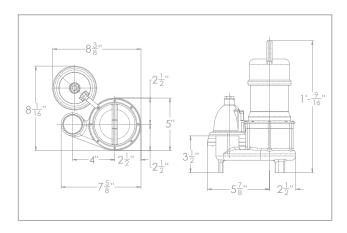




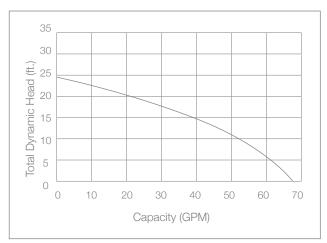
## System Specifications

Typical Applications	Basement sump Dewatering
Maximum Capacity	Up to 68 GPM
Maximum Head	Up to 25'
Electrical Data	115 V, 1 Ø, 4.5 FLA, 60 Hz
Motor Data	⅓ HP, 3450 RPM
Recommended Minimum Basin Size	18" × 24"
Automatic Operation  Manual Operation	i: Ion Digital Level Control (standard) SPI: Vertical float M: Manual
Materials of Construction	Cast iron & stainless steel
Impeller	Thermoplastic vortex
Power Cord	10' Standard
Discharge Size	1½" NPT
Solids Handling	1/2"

## Pump Dimensions



## Pump Performance



- Energy efficient motor
- Carbon ceramic mechanical seal
- Thermal overload protection
- Piggy back lon® digital level control switch has no moving parts (standard)
- Stainless steel screen prevents debris from entering the pump
- 3 year warranty





# BA50i

## Sump Pump

- Basement Sump
- Dewatering

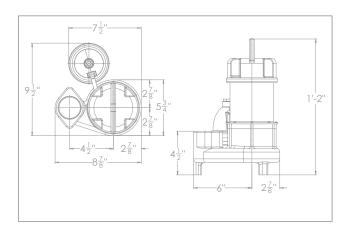




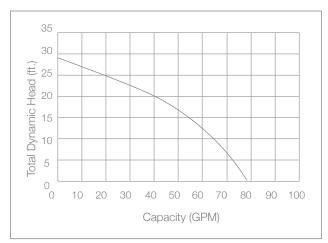
## System Specifications

Typical Applications	Basement sump     Dewatering
Maximum Capacity	Up to 78 GPM
Maximum Head	Up to 29'
Electrical Data	115 V, 1 Ø, 5.8 FLA, 60 Hz
Motor Data	½ HP, 3450 RPM
Recommended Minimum Basin Size	18" x 24"
Automatic Operation  Manual Operation	i: Ion Digital Level Control (standard) SPI: Vertical float M: Manual
Materials of Construction	Cast iron & stainless teel
Impeller	Cast iron vortex
Power Cord	10' Standard (20' optional)
Discharge Size	2" NPT
Solids Handling	1/2"

## Pump Dimensions



## Pump Performance



- Energy efficient motor
- Carbon ceramic mechanical seal
- Thermal overload protection
- Piggy back lon® digital level control switch has no moving parts (standard)
- Stainless steel screen prevents debris from entering the pump
- 3 year warranty





# BA75i

Sump Pump

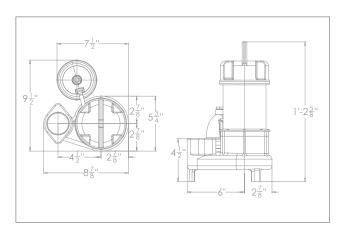
- Basement Sump
- Dewatering



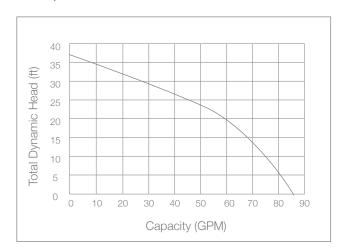
## System Specifications

Tarker Are Pereller	Basement sump
Typical Applications	Dewatering
Maximum Capacity	Up to 85 GPM
Maximum Head	Up to 37'
Electrical Data	115 V, 1 Ø, 7.5 FLA, 60 Hz
Motor Data	<sup>3</sup> / <sub>4</sub> HP, 3450 RPM
Minimum Sump Diameter	18"
Automatic Operation  Manual Operation	i: Ion Digital Level Control (standard) SPI: Vertical float M: Manual
Materials of Construction	Cast iron & stainless teel
Impeller	Cast iron vortex
Power Cord	20' Standard
Discharge Size	2" NPT
Solids Handling	1/2"

## Pump Dimensions



## Pump Performance



- Energy efficient motor
- Carbon ceramic mechanical seal
- Thermal overload protection
- Piggy back lon® digital level control switch has no moving parts (standard)
- Stainless steel screen prevents debris from entering the pump
- 3 year warranty





# **ES45**

## Effluent Pump

- Septic tank effluent
- Dewatering
- High head sump



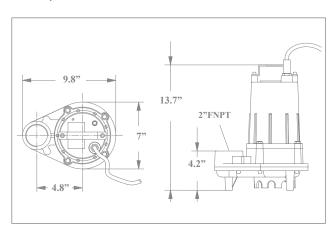


# ES45 Effluent Pump

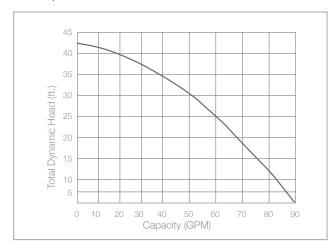
## System Specifications

Typical Applications	Septic tank effluent Dewatering High head sump
Maximum Capacity	Up to 90 GPM
Maximum Head	Up to 42'
Electrical Data ES45M1 ES45M21	115 V, 1 Ø, 11 FLA, 60 Hz 230 V, 1 Ø, 5.5 FLA, 60 Hz
Motor Data	½ HP, 3450 RPM
Intermittent Liquid Temperature	104° F
Recommended Minimum Basin Size	18" x 30"
Automatic Operation  Manual Operation	i: Ion Digital Level Control (standard) W: Wide angle float M: Manual
Materials of Construction	Cast iron
Impeller	Cast iron vortex
Power Cord	SJTW 16/3C-20'
Discharge	2" NPT
Solids Handling	3/4"

## Pump Dimensions



## Pump Performance



- Carbon ceramic mechanical seal
- Automatic reset thermal overload for maximum protection
- Lower single-row ball-bearing construction
- Piggy back Ion® digital level control switch has no moving parts (standard)
- 3 year warranty





# ES50-100

## Effluent Pump

- Septic tank effluent
- Dewatering
- High head sump





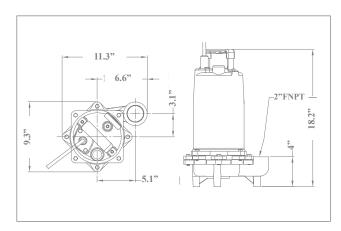
### System Specifications

Septic tank effluent Typical Applications Dewatering High head sump Maximum Capacity ES50 Up to 108 GPM ES100 Up to 135 GPM Maximum Head ES50 Up to 53' Up to 82' ES100 Electrical Data 115 V, 1 Ø, 12 FLA, 60 Hz ES50M-1 ES50M-21 230 V, 1 Ø, 6 FLA, 60 Hz ES50M-03 208 V, 3 Ø, 3.5 FLA, 60 Hz ES50M-23 230 V, 3 Ø, 3.2 FLA, 60 Hz ES50M-43 460 V, 3 Ø, 1.6 FLA, 60 Hz ES100M-21 230 V, 1 Ø, 12 FLA, 60 Hz ES100M-03 208 V, 3 Ø, 6.6 FLA, 60 Hz ES100M-23 230 V, 3 Ø, 6.0 FLA, 60 Hz ES100M-43 460 V, 3 Ø, 3.0 FLA, 60 Hz Motor Data ½-1 HP, 3450 RPM Intermittent Liquid 104° F Temperature Recommended 18" x 30" Minimum Basin Size **Automatic Operation** i: Ion Digital Level Control (standard) W: Wide angle float Manual Operation M: Manual Materials of Cast iron Construction Impeller Cast iron 2 vane closed Power Cord ES50/100 1Ø 16/3C-20' ES50/100 3Ø 16/4C-20' Discharge 2" NPT

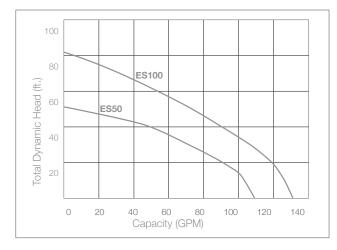
# ES50-100

Effluent Pump

#### **Pump Dimensions**



### Pump Performance



#### Features

Solids Handling

- Carbon ceramic mechanical seal
- Automatic reset thermal overload for maximum protection
- Lower single-row ball-bearing construction

3/4"

3 year warranty





# X-ONEi

Submersible All In One Pump

- Basement Sump
- Septic Tank Effluent
- Sewage Ejector



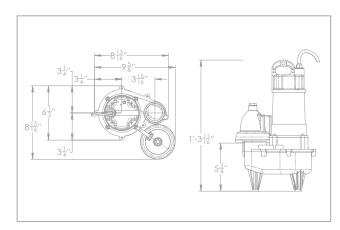


# X-ONEi Submersible All In One Pump

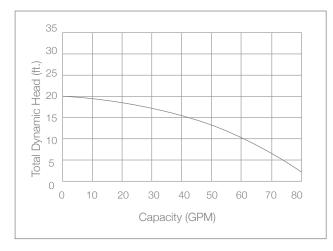
## System Specifications

Typical Applications	<ul><li>Basement sump</li><li>Sewage Ejector</li><li>Septic tank effluent</li></ul>
Maximum Capacity	Up to 80 GPM
Maximum Head	Up to 20'
Electrical Data	115 V, 1 Ø, 8.2 FLA, 60 Hz
Motor Data	½ HP, 3450 RPM
Intermittent Liquid Temperature	120° F
Recommended Minimum Basin Size	18" x 24"
Automatic Operation  Manual Operation	i: Ion Digital Level Control (standard) M: Manual
Materials of Construction	Cast iron & engineered thermoplastic
Power Cord	10' Standard
Discharge	2" with 11/2" reducer
Solids	1½" to 2"

### **Pump Dimensions**



## Pump Performance



- Carbon ceramic mechanical seal
- Oil-filled motor with automatic reset thermal overload protection
- Upper and lower single-row ball-bearing construction
- Piggyback Ion® digital level control switch has no moving parts (standard)
- 3 year warranty





# **SE40-60i**

## Sewage Pump

- Septic tank effluent
- High capacity sump
- Commercial sewage
- Residential sewage





# **SE40-60i**

Sewage Pump

### System Specifications

Septic tank effluent

Typical Applications High capacity sump Commercial sewage

Residential sewage

Maximum Capacity

SE40: Up to 117 GPM SE60: Up to 174 GPM

Maximum Head Up to 26'

**Electrical Data** 

SE40M-1: 115 V, 1 Ø, 11 FLA, 60 Hz SE40M-21: 230 V, 1 Ø, 5.5 FLA, 60 Hz SE60M-1: 115 V, 1 Ø, 12 FLA, 60 Hz SE60M-01: 208 V, 1 Ø, 7.5 FLA, 60 Hz SE60M-21: 230 V, 1 Ø, 6.0 FLA, 60 Hz SE60M-23: 230 V 3 Ø, 4.5 FLA, 60 Hz SE60M-43: 460 V, 3 Ø, 2.3 FLA 60 Hz, SE60M-03: 208 V, 3 Ø, 4.7 FLA, 60 Hz

Motor Data

SE40: 4/10 HP, 1750 RPM SE60: 6/10 HP, 1750 RPM

Recommended Minimum Basin Size 18" x 30"

Automatic Operation i: Ion Digital Level Control

Manual Operation (standard)
M: Manual

Materials of Cast iron

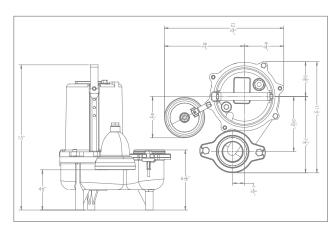
Impeller Cast iron, 2-vane

Power Cord 20' Standard

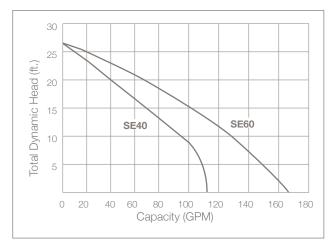
Discharge Size 2" NPT (3" NPT optional)

Solids Handling 2"

## Pump Dimensions



### Pump Performance



- Carbon ceramic mechanical seal
- Oil-filled high efficiency PSC motor
- Uses single-row ball-bearing construction
- Piggy back Ion® digital level control switch has no moving parts (standard)
- 3 year warranty



# SHV40i

## Sewage Pump

- Light commercial sewage
- Residential sewage
- High-capacity sump
- Septic tank effluent



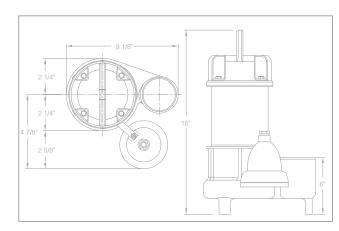


# SHV40i Sewage Pump

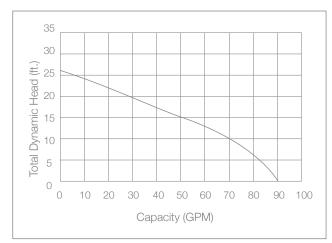
## System Specifications

Typical Applications	Light commercial sewage Residential sewage High-capacity sump Septic tank effluent
Maximum Capacity	Up to 90 GPM
Maximum Head	Up to 25'
Electrical Data	115 V, 1 Ø, 8.5 FLA, 60 Hz 230 V, 1 Ø, 4.3 FLA, 60 Hz
Motor Data	1/2 HP, 3450 RPM
Intermittent Liquid Temperature	130° F
Recommended Minimum Basin Size	18" x 30"
Automatic Operation  Manual Operation	i: Ion Digital Level Control (standard) M: Manual
Materials of Construction	Cast iron and stainless steel
Impeller	Cast iron vortex
Power Cord	20' Standard
Discharge	2" NPT
Solids Handling	2"

### Pump Dimensions



## Pump Performance



- Carbon ceramic mechanical seal
- Automatic reset thermal overload for maximum protection
- Lower single-row ball-bearing construction
- Piggy back Ion® digital level control switch has no moving parts (standard)
- 3 year warranty





# SHV75i

## Sewage Pump

- Light commercial sewage
- Residential sewage
- High-capacity sump
- Septic tank effluent



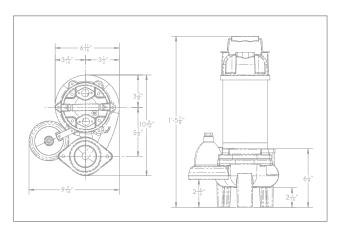


# SHV75i Sewage Pump

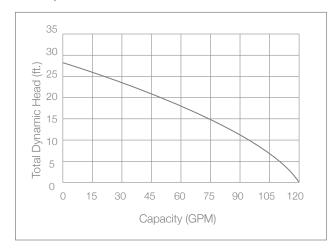
## System Specifications

Typical Applications	Light commercial sewage Residential sewage High-capacity sump Septic tank effluent
Maximum Capacity	Up to 120 GPM
Maximum Head	Up to 28'
Electrical Data	115 V, 1 Ø, 11.5 FLA, 60 Hz
Motor Data	3/4 HP, 3450 RPM
Intermittent Liquid Temperature	130° F
Recommended Minimum Basin Size	18" x 30"
1 10 0 0 1 1 11 1 10 1 10 10 01	18" x 30" i: lon Digital Level Control M: Manual
Minimum Basin Size  Automatic Operation	i: Ion Digital Level Control
Minimum Basin Size  Automatic Operation Manual Operation  Materials of	i: Ion Digital Level Control M: Manual
Minimum Basin Size  Automatic Operation  Manual Operation  Materials of  Construction	i: Ion Digital Level Control M: Manual Cast iron & stainless steel
Minimum Basin Size  Automatic Operation Manual Operation  Materials of Construction  Impeller	i: Ion Digital Level Control M: Manual  Cast iron & stainless steel  Cast iron vortex

## Pump Dimensions



## Pump Performance



- Carbon ceramic mechanical seal
- Automatic reset thermal overload for maximum protection
- Lower single-row ball-bearing construction
- Piggy back Ion® digital level control switch with no moving parts (standard)
- 3 year warranty





# **SHV100**

## Sewage Pump

- Light commercial sewage
- Residential sewage
- High-capacity sump
- Septic tank effluent



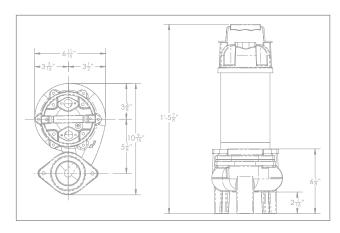
# **SHV100**

Sewage Pump

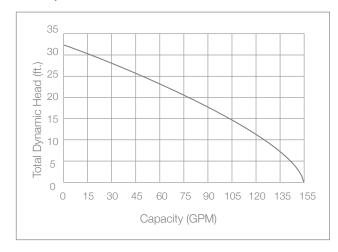
### System Specifications

System Specifications	
Typical Applications	<ul><li>Light commercial sewage</li><li>Residential sewage</li><li>High-capacity sump</li><li>Septic tank effluent</li></ul>
Maximum Capacity	Up to 155 GPM
Maximum Head	Up to 32'
Electrical Data	115 V, 1 Ø, 14 FLA, 60 Hz 208-230 V, 1 Ø, 7.7-7 FLA, 60 Hz
Motor Data	1 HP, 3450 RPM
Intermittent Liquid Temperature	130° F
Recommended Minimum Basin Size	18" x 30"
Manual Operation Automatic Operation	M: Manual (Standard) i: Ion Digital Level Control (115 Volt Only) W: Wide Angle Switch (115 Volt or 230 Volt)
Materials of Construction	Cast iron and stainless steel
Impeller	Cast iron vortex
Power Cord	20' Standard
Discharge	2" NPT, optional 3"
Solids Handling	2"

## Pump Dimensions



## Pump Performance



- Carbon ceramic mechanical seal
- Automatic reset thermal overload for maximum protection
- Lower single-row ball-bearing construction
- 3 year warranty





# SHS50

## Sewage Pump

- Septic tank effluent
- Commercial sewage
- Residential sewage
- High-capacity sump



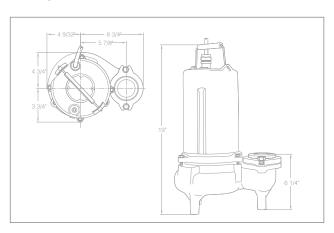


# SHS50 Sewage Pump

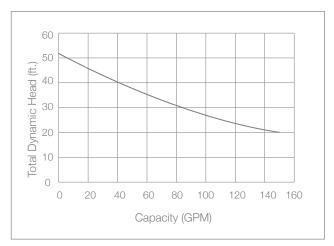
## System Specifications

Typical Applications	Septic tank effluent Commercial sewage Residential sewage High-capacity sump
Maximum Capacity	Up to 150 GPM
Maximum Head	Up to 50'
Electrical Data	115 V, 1 Ø, 14.2 FLA, 60 Hz
Motor Data	½ HP, 3450 RPM
Intermittent Liquid Temperature	140° F
Recommended Minimum Basin Size	18" x 30"
Manual Operation Automatic Operation	M: Manual (standard) i: Ion Digital Level Control W: Wide angle switch
Materials of Construction	Cast iron
Impeller	Cast iron
Power Cord	20' Standard
Discharge	2" NPT (3" optional)
Solids Handling	2"

## Pump Dimensions



## Pump Performance



- Carbon ceramic mechanical seal
- Automatic reset thermal overload for maximum protection
- Lower single-row ball-bearing construction
- 3 year warranty





# SEH50-SEH100-SEH200

Heavy Duty High Head Sewage Pump

- High capacity pump
- Commercial sewage
- Septic tank effluent
- Dewatering
- High head sump



# igh Head Sewage Eiector Pumps

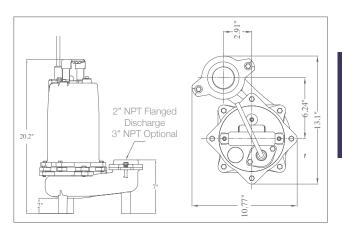
# SEH50-SEH100-SEH200

Heavy Duty Sewage Pump

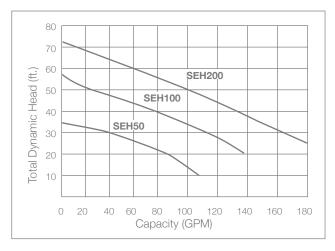
## System Specifications

Typical Applications	High capacity pump Commercial sewage Septic tank effluent Dewatering High head sump
Maximum Capacity SEH50 SEH100 SEH200	114 GPM @ 10' 138 GPM @ 20' 180 GPM @ 25'
Maximum Head SEH50 SEH100 SEH200	Up to 35' Up to 58' Up to 72'
Electrical Data	115 V, 1 Ø, 12.0 FLA, 60 Hz 230 V, 1 Ø, 6.0 FLA, 60 Hz 208 V, 3 Ø, 4.2 FLA, 60 Hz 230 V, 3 Ø, 4.0 FLA, 60 Hz 460 V, 3 Ø, 2.0 FLA, 60 Hz 230 V, 1 Ø, 11.0 FLA, 60 Hz 208 V, 3 Ø, 6.8 FLA, 60 Hz 230 V, 3 Ø, 6.6 FLA, 60 Hz 460 V, 3 Ø, 3.3 FLA, 60 Hz 230 V, 1 Ø, 18.0 FLA, 60 Hz 230 V, 3 Ø, 10.4 FLA, 60 Hz 230 V, 3 Ø, 9.0 FLA, 60 Hz 460 V, 3 Ø, 9.0 FLA, 60 Hz
Motor Data	½ & 1 & 2 HP, 3450 RPM
Intermittent Liquid Temperature	104° F
Recommended Minimum Basin Size	18" × 30"
Manual Operation	W: Wide angle float M: Manual
Materials of Construction	Cast iron
Impeller	Cast iron, vortex
Power Cord (20') SEH50 1Ø SEH100 1Ø SEH200 1Ø SEH50 3Ø SEH100 3Ø SEH200 3Ø	16AWG/3C 16AWG/3C 14AWG/3C 16AWG/4C 16AWG/4C
Discharge	2" or 3" NPT optional
Solids Handling	2"

### **Pump Dimensions**



## Pump Performance



- Carbon ceramic mechanical seal
- Automatic reset thermal overload for maximum protection
- Lower single-row ball-bearing construction
- 3 year warranty





# SEF100-SEF200

## Heavy Duty Sewage Pump

- High capacity pump
- Commercial sewage
- Septic tank effluent
- Dewatering
- High head sump





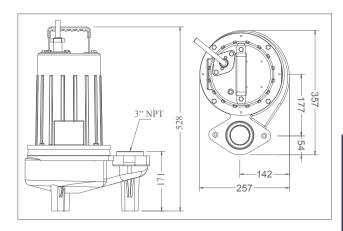
# SEF100-SEF200

Heavy Duty Sewage Pump

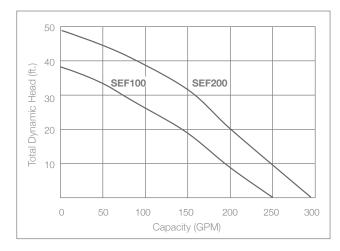
## System Specifications

Typical Applications	High capacity pump Commercial sewage Septic tank effluent Dewatering High head sump
Maximum Capacity SEF100 SEF200	190 GPM @ 10' 245 GPM @ 10'
Maximum Head SEF100 SEF200	Up to 37' Up to 49'
Electrical Data	230 V, 1 Ø, 10.8 FLA, 60 Hz 230 V, 3 Ø, 8.0 FLA, 60 Hz 208 V, 3 Ø, 8.5 FLA, 60 Hz 460 V, 3 Ø, 4.0 FLA, 60 Hz 230 V, 1 Ø, 16.7 FLA, 60 Hz 230 V, 3 Ø, 11.0 FLA, 60 Hz 208 V, 3 Ø, 11.5 FLA, 60 Hz 460 V, 3 Ø, 5.5 FLA, 60 Hz
Motor Data	1 & 2 HP, 1750 RPM
Intermittent Liquid Temperature	104° F
Recommended Minimum Basin Size	18" x 30"
Manual Operation	M: Manual
Materials of Construction	Cast iron
Impeller	Cast iron, vortex
Power Cord SEF100M1Ø-20 SEF200M1Ø-20 SEF100M 3Ø-20 SEF200M 3Ø-20	14AWG/3C-20' 12AWG/3C-20' 14AWG/4C-20' 14AWG/4C-20'
Discharge	2" or 3" NPT opt.

### Pump Dimensions



## Pump Performance



### Features

Solids Handling

- Carbon ceramic mechanical seal
- Automatic reset thermal overload for maximum protection
- Lower single-row ball-bearing construction
- 3 year warranty





# **HT40**

## Submersible Sump Pump

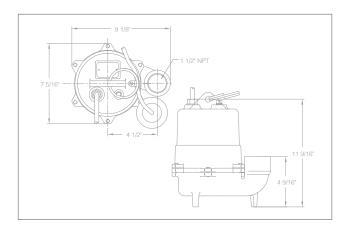
- Boiler blow down
- Condensate pits
- Hot water transfer



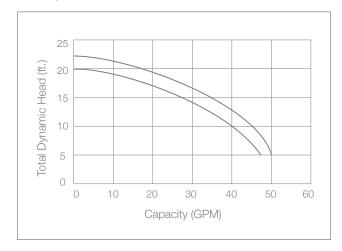
#### System Specifications

Typical Applications	Boiler blow down Condensate pits Hot water transfer
Maximum Capacity	Up to 50 GPM
Maximum Head	Up to 23'
Electrical Data	115 V, 1 Ø, 12 FLA, 60 Hz
Motor Data	⅓ HP, 1750 RPM
Intermittent Liquid Temperature	194° F
Recommended Minimum Basin Size	18" x 24"
Manual Operation Automatic Operation	M: Manual (standard) High temperature float
Materials of Construction	Cast iron
Impeller	Thermoplastic vortex
Power Cord	20' Standard
Discharge	1½" NPT
Solids Handling	3/4"

#### Pump Dimensions



#### Pump Performance



- Carbon ceramic mechanical seal
- Automatic reset thermal overload for maximum protection
- Piggy back models available
- 3 year warranty





# EXP50

### **Explosion Proof Pump**

- Service stations
- Car/truck washes
- Military bases
- Truck decks



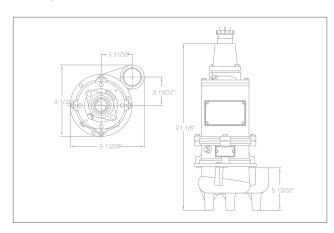


# **EXP50**Explosion Proof Pump

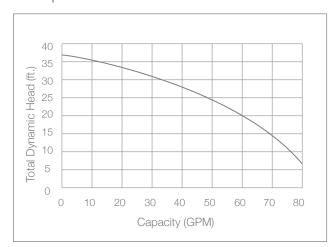
#### System Specifications

Typical Applications	<ul><li>Service stations</li><li>Car/truck washes</li><li>Military bases</li><li>Truck decks</li></ul>
Maximum Capacity	Up to 80 GPM
Maximum Head	Up to 36'
Electrical Data	230 V, 1 Ø, 4.9 FLA, 60 Hz 230 V, 3 Ø, 3.2 FLA, 60 Hz 460 V, 3 Ø, 1.6 FLA, 60 Hz
Motor Data	½ HP, 1750 RPM
Intermittent Liquid Temperature	140° F
Recommended Minimum Basin Size	24" x 30"
Operation	Control Panel Required
Materials of Construction	Cast iron
Impeller	Cast iron
Power Cord	15' Standard
Discharge	1½" NPT
Solids Handling	3/4"

#### **Pump Dimensions**



#### Pump Performance



#### Pump Features

- Oil filled motor
- Upper & lower bearings
- Single row ball bearing construction
- Dual carbon/ceramic Type 21 mechanical shaft seal
- 3 year warranty
- NEMA 4X enclosure with inner door

#### Control Panel Features

- Separate pump and control circuit breaker
- Intrinsically safe module for floats
- H-O-A switch
- Run, seal leak, and alarm light
- Motor starter and capacitor
- UL 913





## **WC33i+**

Sump Pump With Built-In High Water Alarm

- Basement Sump
- Septic Tank Effluent
- Dewatering



Patent No. 8,591,198

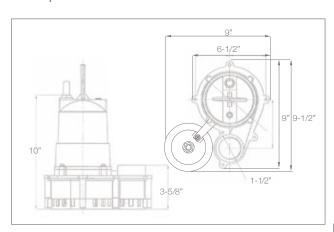
## WC33i+

#### Sump Pump With Built-In High Water Alarm

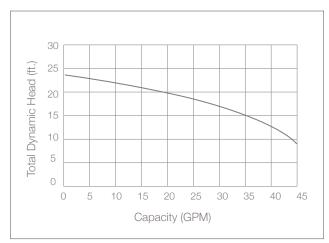
#### System Specifications

Typical Applications	<ul><li>Basement sump</li><li>Dewatering</li><li>Septic tank effluent</li></ul>
Maximum Capacity	Up to 45 GPM
Maximum Head	Up to 24'
Electrical Data	115 V, 1 Ø, 4 FLA, 60 Hz
Motor Data	1/3 HP, 3450 RPM
Recommended Minimum Basin Size	18" x 24"
Automatic Operation	i+: lon+ (standard)
Materials of Construction	Cast iron & engineered thermoplastic
Power Cord	10' Standard
Discharge	1½" NPT
Solids	1/2"

#### Pump Dimensions



#### Pump Performance



- Carbon ceramic mechanical seal
- Oil-filled high efficiency PSC motor that uses half the AC power of most 1/3 HP pumps
- Piggyback Ion+® digital level control switch with alarm has no moving parts (standard)
- 3 year warranty





# BA33i+

Sump Pump With Built-In High Water Alarm

- Basement Sump
- Dewatering



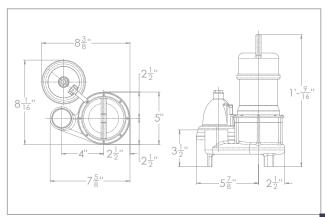


#### Sump Pump With Built-In High Water Alarm

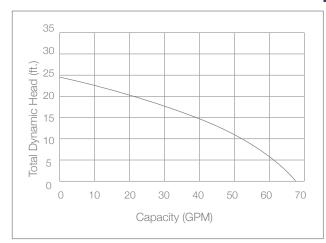
#### System Specifications

Typical Applications	Basement sump Dewatering
Maximum Capacity	Up to 68 GPM
Maximum Head	Up to 25'
Electrical Data	115 V, 1 Ø, 4.5 FLA, 60 Hz
Motor Data	1/3 HP, 3450 RPM
Recommended Minimum Basin Size	18" x 24"
Automatic Operation	i+: lon+ (standard)
Materials of Construction	Cast iron & stainless teel
Impeller	Thermoplastic vortex
Power Cord	10' Standard
Discharge Size	1½" NPT
Solids Handling	1/2"

#### Pump Dimensions



#### Pump Performance



- Energy efficient motor
- Carbon ceramic mechanical seal
- Thermal overload protection
- Piggyback Ion+® digital level control switch with alarm has no moving parts (standard)
- Stainless steel screen prevents debris from entering the pump
- 3 year warranty





## **BA50i+**

Sump Pump With Built-In High Water Alarm

- Basement Sump
- Dewatering



Patent No. 8,591,198

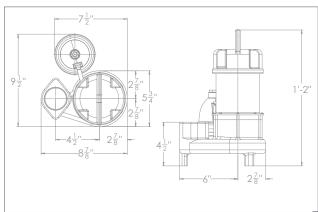


#### Sump Pump With Built-In High Water Alarm

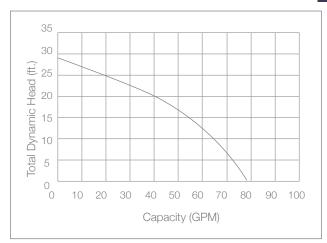
#### System Specifications

Typical Applications	Basement sump     Dewatering
Maximum Capacity	Up to 78 GPM
Maximum Head	Up to 29'
Electrical Data	115 V, 1 Ø, 5.8 FLA, 60 Hz
Motor Data	½ HP, 3450 RPM
Recommended Minimum Basin Size	18" x 24"
Automatic Operation	i+: lon+ (standard)
Materials of Construction	Cast iron & stainless teel
Impeller	Cast iron vortex
Power Cord	10' Standard
Discharge Size	2" NPT
Solids Handling	1/2"

#### Pump Dimensions



#### Pump Performance



- Energy efficient motor
- Carbon ceramic mechanical seal
- Thermal overload protection
- Piggyback Ion+® digital level control switch with alarm has no moving parts (standard)
- Stainless steel screen prevents debris from entering the pump
- 3 year warranty





# BA75i+

Sump Pump With Built-In High Water Alarm

- Basement Sump
- Dewatering



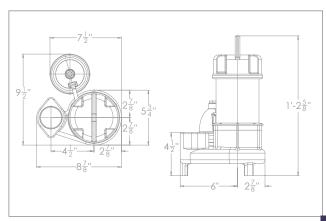
## **BA75i+**

#### Sump Pump With Built-In High Water Alarm

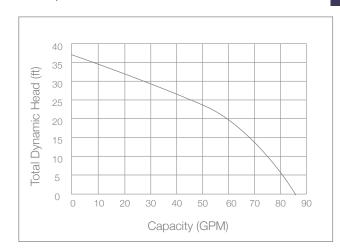
#### System Specifications

Typical Applications	Basement sump Dewatering
Maximum Capacity	Up to 85 GPM
Maximum Head	Up to 37'
Electrical Data	115 V, 1 Ø, 7.5 FLA, 60 Hz
Motor Data	¾ HP, 3450 RPM
Minimum Sump Diameter	18"
Automatic Operation	i+: lon+ (standard)
Materials of Construction	Cast iron & stainless teel
Impeller	Cast iron vortex
Power Cord	10' Standard
Discharge Size	2" NPT
Solids Handling	1/2"

#### **Pump Dimensions**



#### Pump Performance



- Energy efficient motor
- Carbon ceramic mechanical seal
- Thermal overload protection
- Piggyback Ion+® digital level control switch with alarm has no moving parts (standard)
- Stainless steel screen prevents debris from entering the pump
- 3 year warranty





# X-ONEi+

Submersible All In One Pump With Built-In High Water Alarm

- Basement Sump
- Septic Tank Effluent
- Sewage Ejector

Metropolitan Industries, Inc. Patent No. 8,591,198

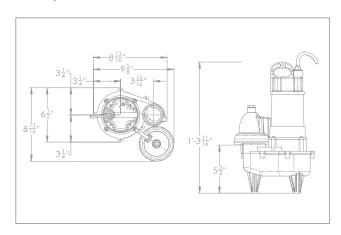


#### Submersible All In One Pump With Built-In High Water Alarm

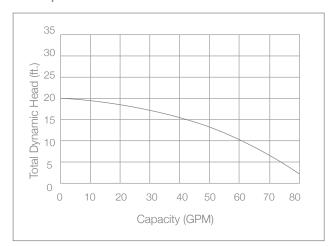
#### System Specifications

Typical Applications	<ul><li>Basement sump</li><li>Sewage Ejector</li><li>Septic tank effluent</li></ul>
Maximum Capacity	Up to 80 GPM
Maximum Head	Up to 20'
Electrical Data	115 V, 1 Ø, 8.2 FLA, 60 Hz
Motor Data	½ HP, 3450 RPM
Intermittent Liquid Temperature	120° F
Recommended Minimum Basin Size	18" x 24"
Automatic Operation	i+: lon+ (standard)
Materials of Construction	Cast iron & engineered thermoplastic
Power Cord	10' Standard
Discharge	2" with 1½" reducer
Solids	1½" to 2"

#### Pump Dimensions



#### Pump Performance



- Carbon ceramic mechanical seal
- Oil-filled high efficiency PSC motor that uses half the AC power of most 1/3 HP pumps
- Upper and lower single-row ball-bearing construction
- Piggyback Ion+® digital level control switch with alarm has no moving parts (standard)
- 3 year warranty



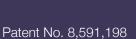


# SHV40i+

Sewage Pump With Built-In High Water Alarm

- Light commercial sewage
- Residential sewage
- High-capacity sump
- Septic tank effluent

Metropolitan Industries, Inc.



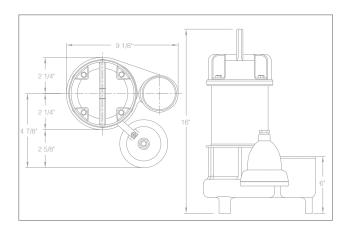
## SHV40i+

#### Sewage Pump With Built-In High Water Alarm

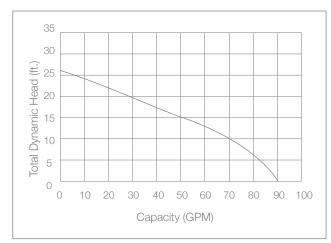
#### System Specifications

Typical Applications	Light commercial sewage Residential sewage High-capacity sump Septic tank effluent
Maximum Capacity	Up to 90 GPM
Maximum Head	Up to 25'
Electrical Data	115 V, 1 Ø, 8.5 FLA, 60 Hz
Motor Data	1/2 HP, 3450 RPM
Intermittent Liquid Temperature	130° F
Recommended Minimum Basin Size	18" x 30"
Automatic Operation	i+: lon+ (standard)
Materials of Construction	Cast iron and stainless steel
Impeller	Cast iron vortex
Power Cord	20' Standard
Discharge	2" NPT
Solids Handling	2"

#### Pump Dimensions



#### Pump Performance



- Carbon ceramic mechanical seal
- Automatic reset thermal overload for maximum protection
- Lower single-row ball-bearing construction
- Piggyback Ion+® digital level control switch with alarm has no moving parts (standard)
- 3 year warranty





# Ion<sub>®</sub>

#### Digital Level Control Switch

- Rated for use in both sump and sewage pump applications
- Will work with any 115 volt pump up to 15 amps
- Solid state sensing technology with no moving parts to wear or fail
- Designed to operate for over 2 million cycles
- Longer pumping differential means it will pump more water less frequently
- 10 and 20 foot cord options are available





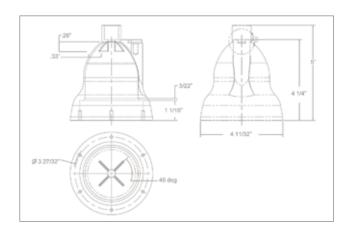
#### Digital Level Control Switch

#### Assembly View

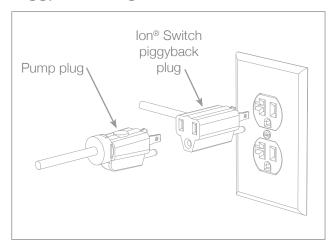
- 1. Cord strain relief follower
- 2. Mounting arm screw
- 3. Switch mounting arm
- 4. Top housing
- 5. Control and logic boards
- 6. Switch bracket
- 7. Strain gauge
- 8. Pressure plate
- 9. Diaphragm with integrated o-ring gasket
- 10. Diaphragm guard



#### Switch Dimensions



#### Piggyback Plug Illustration



#### System Specifications

Type of Application: Sump and sewage

· Voltage: 115 volt

Amp Rating: 13 FLA, 15 amp max

Power Cord: 10' or 20'Pump Range: 6" or 8.5"

3 year warranty





## Ion+®

#### Digital Level Control with High Water Alarm

- World's first digital piggyback style sump & sewage pump level control sensor with integrated alarms
- Provides alarm notification via an audible buzzer, LED indicators, and dry alarm contact
- Device can be connected to external alarm notification systems such as our lon Gateway® or MetroMail™ systems, for real-time notification capability
- Ion® digital level control technology provides superior performance and reliability when compared to industry standard mechanical pump switches



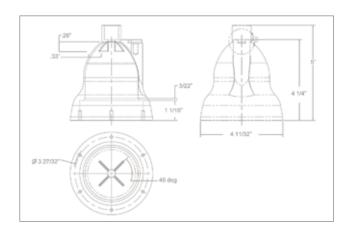


#### Digital Level Control with High Water Alarm

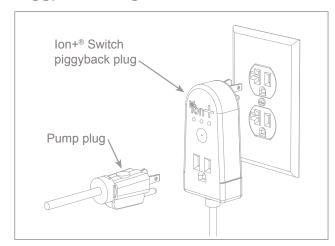
# Typical Installation

- lon+® piggyback plug with audible alarm and visual status LEDs
- 2. lon+® digital level control sensor
- 3. Standard Ion® StormPro® pump (not included)
- 4. Basin (not included)

#### Switch Dimensions



#### Piggyback Plug Illustration



#### System Specifications

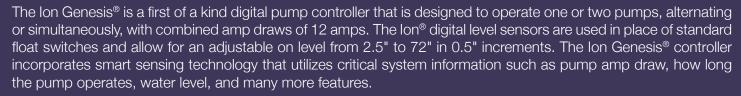
- Built in alarm and monitoring system
- Power, system and high water LEDs indicate system status
- Audible alarm buzzer
- Dry contact
- Remote alarm port type RJ11
- First of a kind solid-state sensing technology with no moving parts
- Starts and stops pump via the piggyback pump power receptacle
- Multipoint sealing mechanism that supersedes single surface seals
- Inverter rated for use with most battery backup systems
- No contact points
- 3 year warranty





## Ion Genesis

#### Smart Controller and Sensors



You can collect and analyze system data never before possible with the level sensor controllers. Any change or variation in your system performance will sound an alarm or alert of possible equipment failure before flooding occurs. This new technology allows you to adjust the turn on level of your system without removing the system cover.



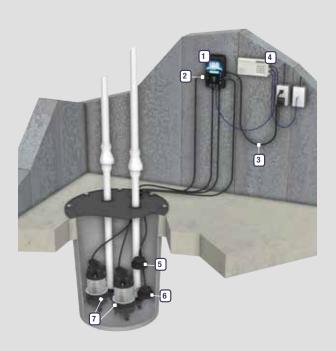


Patent No. 8,591,198 & 8,907,789 B2

## Ion Genesis

#### Smart Controller and Sensors

#### Typical Installation Diagram



- Ion Genesis®
- Pump outlets
- 3. Power cord
- 4. Dialer (optional)
- 5. High water sensor
- Digital level sensor
- Pumps (optional)





- 1. LED Lights: Indicate when the pump or pumps are running, system power, and alarm mode.
- 2. LCD Screen: Displays vital equipment data and alarm notifications.
- 3. Plug & Play Outlets: Pump(s) plug directly into controller just as they would a wall outlet.
- 4. Ion® Digital Level Sensor: Communicates system levels to the Ion Genesis® controller.
- Ion® Digital High Water Sensor: Detects high water and also acts as a secondary switch incase the primary Ion® sensor fails.
- Remote Alarm Contact: Connects to optional dialer or existing security system for remote monitoring when you're away.
- 7. Reset/Test Button: Allows user to manually test system without having to access basin.
- 8. On Level: Manually adjust the pumping turn on level from 2.5" to 72" in 0.5" increments.

#### System Specifications

- Featuring Ion® digital level sensors
  - First of its kind solid-state sensing technology with no moving parts
  - Multipoint sealing mechanism that supersedes single surface seals
  - Rated at 2 million cycles, it will last 4 times longer than a standard pump switch
- Voltage: 120 VAC, 60 Hz
- Output Capacity (per outlet): ½ HP, 12 FLA, 15 amp max, 72 LRA
- Remote Alarm Contacts: Normally closed (open during alarm state) 30 V/DC @ 1 amp max
- Temperature Range: 32° F to 104° F (0° C to 40° C)
- Audible Alarm: 80 dB @ 10 ft.
- Enclosure: NEMA-1 UL94V-0 ABS
- Mounting Hardware (controller): (4) #10 Screws (not included)
- Mounting Dimensions (controller): 8.25" X 3.5"
- 3 year warranty



Now available with optional factory installed **Ethernet Module.** 





# Ion Endeavor

#### Smart Controller and Sensors

- Three model options
- First of a kind 115 or 230 volt standard plug in receptacle, dual pump run and alternating controller for residential and commercial applications
- Ion® sensors communicate with controller to provide controller based turn on level adjustment from 2.5" to 72" for optimal pump operation
- Track critical information through the panel based display, including switch failure, pump amp draw, water level, and more
- Wide range of communication options available

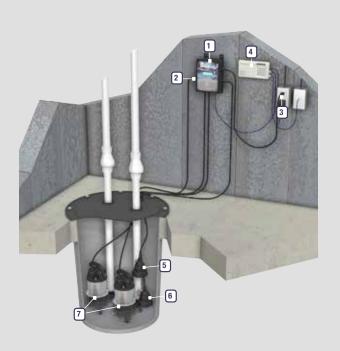




## Ion<sub>®</sub> Endeavor

Smart Controller and Sensors

#### Typical Installation Diagram



- 1. Ion® Endeavor
- 2. Pump outlets
- 3. Power cord
- 4. Dialer (optional)
- 5. High water sensor
- 6. Digital level sensor
- 7. Pumps (optional)

#### Controller Options

Dedicated **Endeavor Power** Supporting Wall Plug Configuration Receptacle Needed Model 100-15 operates two (2) 120 VAC, singlephase pumps, up to 12 amps total 115 V, 15 A 115 V, 15 A Model 100-20 operates two (2) 120 VAC, singlephase pumps, up to 16 amps total 115 V, 20 A 115 V, 20 A Model 200-15 l G operates two (2) 208-240 VAC single-phase pumps, up to 12 amps total

230 V, 15 A

#### System Specifications

- Featuring Ion® digital level sensors
  - First of its kind solid-state sensing technology with no moving parts
  - Multipoint sealing mechanism that supersedes single surface seals
  - Rated at 2 million cycles, it will last 4 times longer than a standard pump switch
- Simultaneously operates two (2) single-phase plug in pumps together when required
- Automatic pump alternation based on duty cycle and/or pump availability
- Clean & safe operation
- Microprocessor based process controls continually monitor system
- Dry digital contact for common alarm, allows remote monitoring
- Metropolitan's variety of optional com-devices allow many communications possibilities:
  - Ethernet Module: system status via web page and email or text message alerts
  - Ion Gateway®: Cellular based unit sends email or text message alerts
  - Telephone Dialer: Phone line unit sends voice message alerts
- 3 year warranty

230 V, 15 A



Now available with optional factory installed Ethernet Module.



# Ion. Endeavor BA33

All parts included to install a smart controller with sensors & pump

- First of a kind 115 volt standard plug in receptacle, dual pump run and alternating controller for residential and commercial applications
- Ion® sensors communicate with controller to provide controller based turn on level adjustment from 2.5" to 72" for optimal pump operation
- Track critical information through the panel based display, including switch failure, pump amp draw, water level and more
- Wide range of communication options available



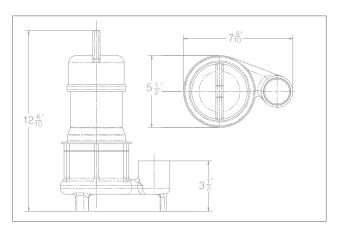
Patents Pending, Patent No. 8,591,198

## Ion. Endeavor BA33

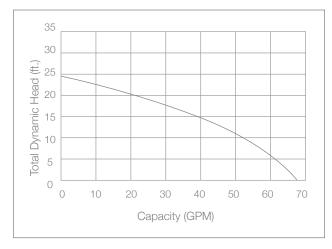
#### System Specifications

Typical Applications	Basement sump Dewatering
Maximum Capacity	Up to 68 GPM
Maximum Head	Up to 25'
Electrical Data	115 V, 1 Ø, 4.5 FLA, 60 Hz
Motor Data	⅓ HP, 3450 RPM
Recommended Minimum Basin Size	18" x 24"
Manual Operation	M: Manual
Materials of Construction	Cast iron & stainless steel
Impeller	Thermoplastic vortex
Power Cord	10' Standard
Discharge Size	1½" NPT
Solids Handling	1/2"

#### BA33 Sump Pump Dimensions



#### BA33 Sump Pump Performance



- Energy efficient motor
- Carbon ceramic mechanical seal
- Thermal overload protection
- lon® digital level control sensor has no moving parts (standard)
- Stainless steel screen prevents debris from entering the pump
- 3 year warranty



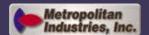
Now available with optional factory installed Ethernet Module.



# Ion Endeavor BA50

All parts included to install a smart controller with sensors & pump

- First of a kind 115 volt standard plug in receptacle, dual pump run and alternating controller for residential and commercial applications
- Ion® sensors communicate with controller to provide controller based turn on level adjustment from 2.5" to 72" for optimal pump operation
- Track critical information through the panel based display, including switch failure, pump amp draw, water level and more
- Wide range of communication options available



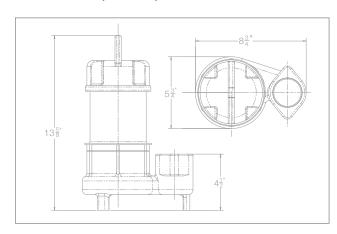
Patents Pending, Patent No. 8,591,198

## Ion<sub>®</sub> Endeavor BA50

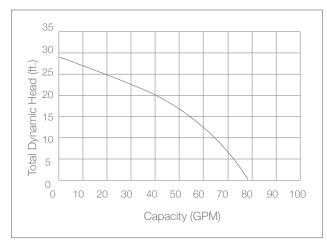
#### System Specifications

Typical Applications	Basement sump Dewatering
Maximum Capacity	Up to 78 GPM
Maximum Head	Up to 29'
Electrical Data	115 V, 1 Ø, 5.8 FLA, 60 Hz
Motor Data	½ HP, 3450 RPM
Recommended Minimum Basin Size	18" x 24"
Manual Operation	M: Manual
Materials of Construction	Cast iron & stainless steel
Impeller	Cast iron vortex
Power Cord	10' Standard (20' optional)
Discharge Size	2" NPT
Solids Handling	1/2"

#### BA50 Sump Pump Dimensions



#### BA50 Sump Pump Performance



- Energy efficient motor
- Carbon ceramic mechanical seal
- Thermal overload protection
- lon® digital level control sensor has no moving parts (standard)
- Stainless steel screen prevents debris from entering the pump
- 3 year warranty





# StormPro<sub>®</sub> 2100DC

#### Battery Backup System

- High quality DC pump capable of pumping over 2,100 gallons per hour
- Heavy duty adjustable vertical float switch for maximum reliability
- High output 8 amp charger unit with 5 charging stages
- Safe for use with AGM maintenance free batteries
- Built-in audible alarm and indicator lights for added protection
- Pump base keeps the pump off the bottom of the basin to avoid clogging from debris
- UL listings ensure reliability



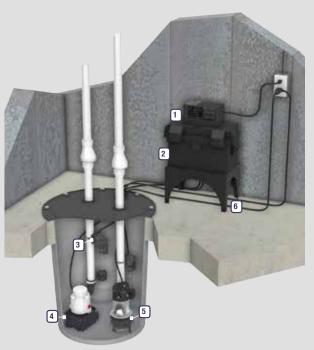


# Battery Back

## StormPro<sub>®</sub> 2100DC

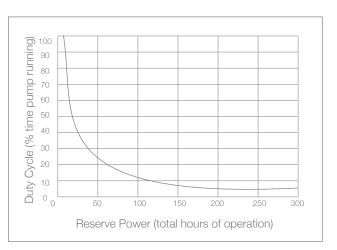
Battery Backup System

#### Typical Installation Diagram



- 1. 8 amp charger unit
- 2. Battery box
- 3. Backup switch
- 4. 12 volt backup pump
- 5. Primary sump pump (not included)
- 6. Stand (optional)

#### System Performance



#### System Specifications

Includes 12 volt DC pump Pump base

Battery box Heavy duty float switch

8 amp charger with built-in audible alarm and status lights

Input Voltage	AC
Output Voltage	DC
Pump Type	12 volt DC submersible
Capacity	35 GPM / 2,100 GPH @ 10'
Installation	Floor mount
Options	Stand, battery add-on kit
Warranty	3 years





# 30ACi+

#### Battery Backup System

- Fully automatic auxiliary power source
- Backup system runs on AC or DC power
- Runs the same 1/3 HP pump in AC or DC mode
- lon+® digital level control sensor with integrated alarms





Patent No. 8,591,198

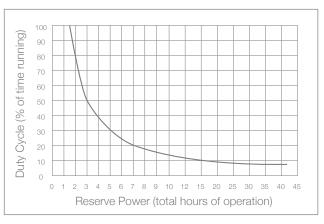
## Battery Back Systems

#### Typical Installation Diagram

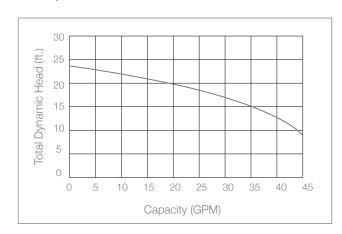


- 1. Battery box with inverter
- 2. 1/3 HP Ion® StormPro® WC33 sump pump
- 3. Ion+® digital level control/alarm sensor
- 4. Recommended minimum basin size: 18" x 24" (not included)

#### System Performance



#### Pump Performance



#### System Specifications

- 1/3 HP pump with PSC, energy efficient motor: 4.0 amps
- Up to 45 GPM
- Fully automatic, converts 12 volt DC to 120 volt AC when utility power is lost
- Runs 1/3 HP pump on AC or DC power
- Inverter has digital display, tells status of system at all times
- Requires one 12 volt deep cycle AGM battery (battery is NOT included)
- Non-corrosive battery enclosure
- Includes piggyback lon+® digital level control/alarm sensor with no moving parts
  - Built-in alarm and monitoring system with Power, System and High Water LEDs and audible alarm
  - Dry contacts to connect to a monitoring device via an RJ11 connection
  - Rated at 2 million cycles, it will last 4 times longer than a standard pump switch
- Quick and easy installation
- 3 year warranty





## 30ACi Deluxe

#### Battery Backup System

- Fully automatic auxiliary power source
- Backup system runs on AC or DC power
- Runs the same 1/3 HP pump with power on or off
- Ion Genesis® controller monitors all pump activity
- Full digital display on inverter and controller
- Ion® digital level sensors have no moving parts





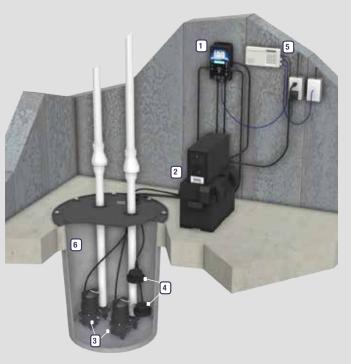
Patents Pending, Patent No. 8,591,198

## Sattery Backu Systems

## **30ACi Deluxe**

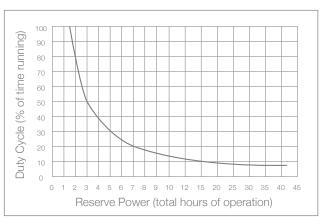
Battery Backup System

#### Typical Installation Diagram

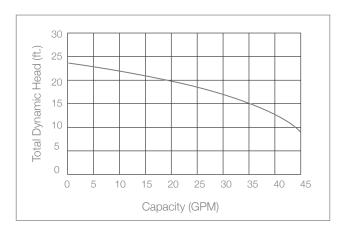


- 1. Ion Genesis® controller
- 2. Battery box with inverter
- 3. 1/3 HP Ion® StormPro® WC33 sump pump
- 4. Ion® digital level control sensors
- 5. Phone dialer (optional)
- 6. Recommended minimum basin size: 18" x 24" (not included)

#### System Performance



#### Pump Performance



#### System Specifications

- 1/3 HP pump with PSC, energy efficient motor: 4.0 amps
- Up to 45 GPM
- Fully automatic, converts 12 volt DC to 120 volt AC when power is off
- Ion Genesis® controller alternates each pump and alarms
- Runs 1/3 HP pump on AC or DC power
- Inverter has digital display, tells status of system at all times
- Uses one 12 volt deep cycle AGM battery (battery is NOT included)
- Non-corrosive battery enclosure
- Includes piggyback lon® digital level control sensors with no moving parts
  - First of its kind solid-state sensing technology with no moving parts
  - Multipoint sealing mechanism that supersedes single surface seals
  - Rated at 2 million cycles, it will last 4 times longer than a standard pump switch
- Quick and easy installation
- 3 year warranty





## 35ACi+

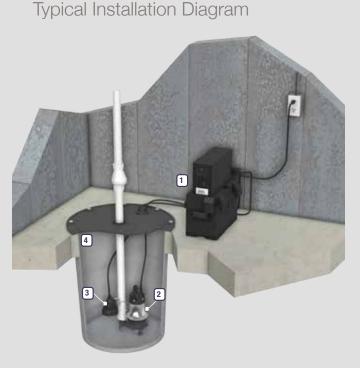
#### Battery Backup System

- Fully automatic auxiliary power source
- Backup system runs on AC or DC power
- Runs the same 1/3 HP pump in AC or DC mode
- Ion+® digital level control sensor with integreated alarms

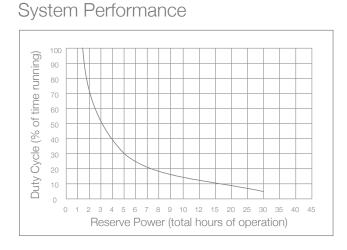




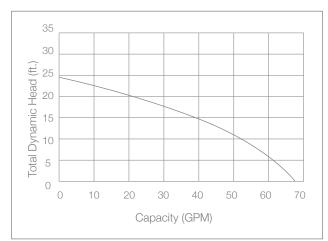
Patent No. 8,591,198



- 1. Battery box with inverter
- 2. Ion® StormPro® sump pump
- 3. Ion+® digital level control/alarm sensor
- 4. Recommended minimum basin size: 18" x 24" (not included)



#### Pump Performance



#### System Specifications

- 1/3 HP pump with PSC, energy efficient motor: 4.5 amps
- Up to 68 GPM
- Fully automatic, converts 12 volt DC to 120 volt AC when utility power is lost
- Runs 1/3 HP pump on AC or DC power
- Inverter has digital display, tells status of system at all times
- Requires one 12 volt deep cycle AGM battery (battery NOT included)
- Non-corrosive battery enclosure
- Includes piggyback Ion+® digital level control/alarm sensor with no moving parts
- Built-in alarm and monitoring system with Power, System and High Water LEDs and audible alarm
- Dry contacts to connect to a monitoring device via an RJ11 connection
- Rated at 2 million cycles, it will last 4 times longer than a standard pump switch
- Quick and easy installation
- 3 year warranty





## 35ACi Deluxe

#### Battery Backup System

- Fully automatic auxiliary power source
- Backup system runs on AC or DC power
- Runs the same 1/3 HP pump with power on or off
- Ion Genesis® controller monitors all pump activity
- Full digital display
- Ion® digital level sensors have no moving parts



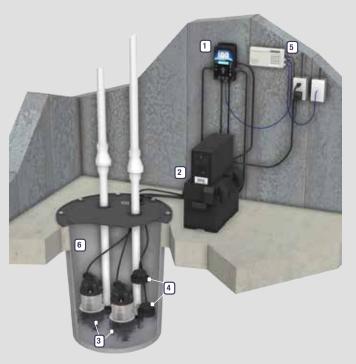


# Sattery Backu

# 35ACi Deluxe

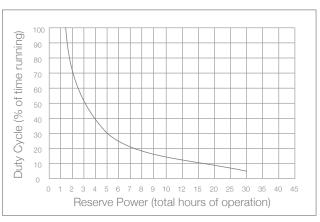
Battery Backup System

#### Typical Installation Diagram

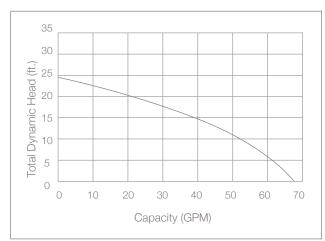


- 1. Ion Genesis® controller
- 2. Battery box with inverter
- 3. Ion® StormPro® sump pumps
- 4. Ion® digital level control sensors
- 5. Phone dialer (optional)
- 6. Recommended minimum basin size: 18" x 24" (not included)

#### System Performance



#### Pump Performance



#### System Specifications

- 1/3 HP pump with PSC, energy efficient motor: 4.5 amps
- Up to 68 GPM
- Fully automatic, converts 12 volt DC to 120 volt AC when power is off
- Runs 1/3 HP pump on AC or DC power
- Inverter has digital display, tells status of system at all times
- Uses one 12 volt deep cycle AGM battery (battery NOT included)
- Non-corrosive battery enclosure
- Includes piggyback lon® digital level control switch with no moving parts
- Quick and easy installation
- 3 year warranty







# 55ACi+

### Battery Backup System

- Fully automatic auxiliary power source
- Backup system runs on AC or DC power
- Runs the same ½ HP pump in AC or DC mode
- lon+® digital level control sensor with integrated alarms



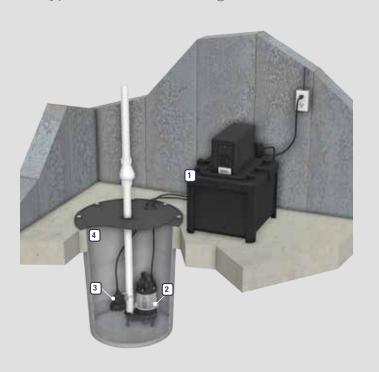


Patents Pending, Patent No. 8,591,198

## 55ACi+

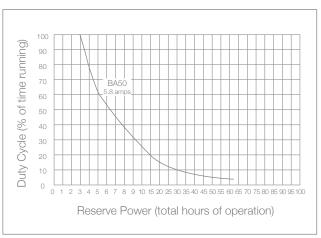
#### Battery Backup System

#### Typical Installation Diagram

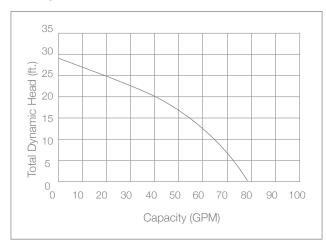


- 1. Battery box with inverter
- 2. Ion® StormPro® sump pump
- 3. Ion+® digital level control/alarm sensor
- 4. Recommended minimum basin size: 18" x 24" (not included)

#### System Performance



#### Pump Performance



#### System Specifications

- 1/2 HP pump with PSC, energy efficient motor: 5.8 amps
- Up to 78 GPM
- Fully automatic, converts 24 volt DC to 120 volt AC when utility power is lost
- Runs ½ HP pump on AC or DC power
- Inverter has digital display, tells status of system at all times
- Requires two 12 volt deep cycle AGM batteries (batteries are NOT included)
- Non-corrosive battery enclosure
- Includes piggyback lon+® digital level control/alarm sensor with no moving parts
  - Built-in alarm and monitoring system with Power, System and High Water LEDs and audible alarm
  - Dry contacts to connect to a monitoring device via an RJ11 connection
- Rated at 2 million cycles, it will last 4 times longer than a standard pump switch
- Quick and easy installation
- 3 year warranty





# 55ACi Deluxe

#### Battery Backup System

- Fully automatic auxiliary power source
- Backup system runs on AC or DC power
- Runs the same pump with power on or off
- Ion Genesis® controller monitors all pump activity
- Full digital display
- Ion® digital level sensors have no moving parts





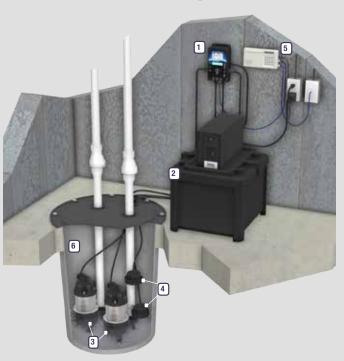
Patents Pending, Patent No. 8,591,198

## Sattery Backu Systems

## **55ACi Deluxe**

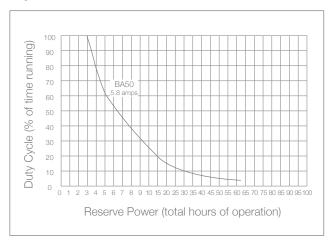
Battery Backup System

#### Typical Installation Diagram

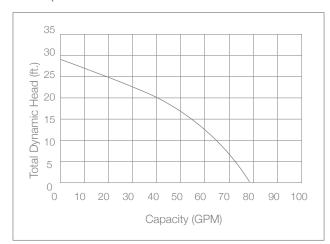


- 1. Ion Genesis® controller
- 2. Battery box with inverter
- 3. Ion® StormPro® sump pumps
- 4. Ion® digital level control sensors
- 5. Phone dialer (optional)
- 6. Recommended minimum basin size: 18" x 24" (not included)

#### System Performance



#### Pump Performance



#### System Specifications

- Fully automatic, converts 24 volt DC to 120 volt AC when power is off
- Runs pump on AC or DC power
- Inverter has digital display, tells status of system at all times
- Requires two 12 volt deep cycle AGM batteries (batteries are NOT included)
- Non-corrosive battery enclosure
- Ion Genesis® controller alternates each pump and alarms
- Ion Genesis® includes piggyback Ion® digital level control sensors with no moving parts
  - First of its kind solid-state sensing technology with no moving parts
  - Multipoint sealing mechanism that supersedes single surface seals
  - Rated at 2 million cycles, it will last 4 times longer than a standard pump switch
- Quick and easy installation
- 3 year warranty





# Sumpro

#### Battery Backup System

- Smaller footprint & lighter than original Sumpro® with quieter operation
- Easy to read LCD screen for real time monitoring
- Alarm contact for remote monitoring and notification
- Solar & wind inputs for battery charging
- Improved charging circuit
- High inrush capability

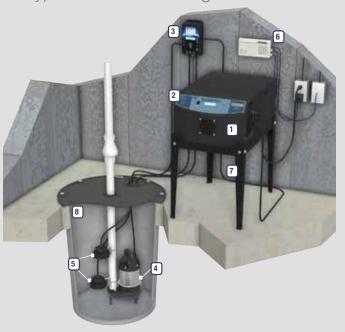




# Sumpro<sub>.</sub>

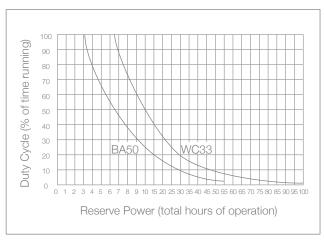
#### Battery Backup System

#### Typical Installation Diagram



- 1. Sumpro®
- 2. Wind & solar inputs
- 3. Ion Genesis® (optional)
- 4. Sump pump (optional)
- 5. Ion Genesis® sensors (optional)
- 6. Phone dialer (optional)
- 7. Stand (optional)
- 8. Recommended minimum basin size: 18" x 24" (not included)

#### System Performance



Performance curve results using a ½ and ½ HP pump with (2) fully charged Power+ 100 amp hour batteries.

#### **Dimensions**



#### System Specifications

System Model	Sumpro® Model 100
Includes	15 amp inverter with status lights  Dual battery box with fuse bar
Input Voltage	120 VAC/24VDC (2 batteries, sold separately), 60 Hz, 12 amp
Output Voltage	120 VAC, 12 amp
Pump Type	Any 115 volt pump up to 12 amps (not included)
Options	Stand, battery add-on kit, Ion Genesis®
Weight	60 lbs
Warranty	3 years







# Sumpro Platinum



# Battery Backup System

- Runs on either AC or DC power
- Supplied with two ¾ HP, 115 volt sump pumps
- Ion Genesis® controller monitors all pump activity, including pump running current, pump trending, and self testing without having to access the basin
- Ion Genesis® sensors have no moving parts or pieces to fail and will far outlast common switch types
- Can be installed as a backup or primary pump



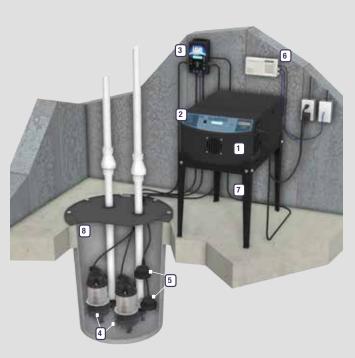
Patents Pending, Patent No. 5,508,905 & 8,591,198

## attery Backur Systems

# Sumpro<sub>®</sub> Platinum

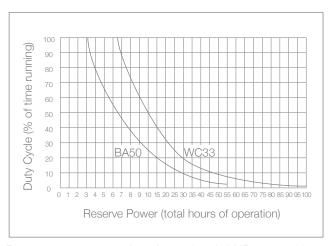
Battery Backup System

#### Typical Installation Diagram



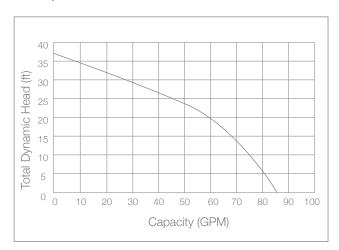
- 1. Sumpro®
- 2. Wind & solar inputs
- 3. Ion Genesis®
- 4. Dual ¾ HP pumps
- 5. Ion Genesis® sensors
- 6. Phone dialer (optional)
- 7. Stand (optional)
- 8. Recommended minimum basin size: 18" x 24" (not included)

#### System Performance



Performance curve results using a  $\frac{1}{3}$  and  $\frac{1}{2}$  HP pump with (2) fully charged Power+ 100 amp hour batteries.

#### Pump Performance



#### System Specifications

- Sumpro® Model 100 inverter rated for 15 amps
- Input Voltage: AC
- Output Voltage: DC / AC
- Includes (2) 3/4 HP pumps, rated up to 85 GPM each, and an Ion Genesis® controller
- Options: Stand, battery add-on kit, automatic phone dialer
- 3 year warranty







# **JSPII**

#### Preassembled Sump & Battery Backup System

- All-in-one system with primary and backup pump
- Comes completely assembled with pumps and valves pre-plumbed
- Simply drop into your existing basin and make one discharge connection
- 3 year warranty

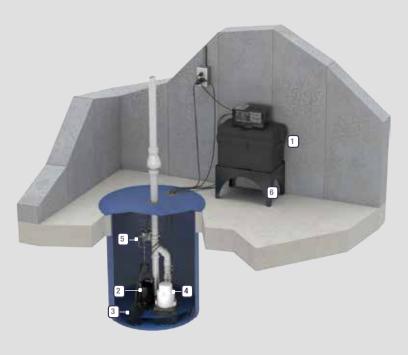


Patent No. 8,591,198

## **JSPII**

#### Preassembled Sump & Battery Backup System

#### Typical Installation Diagram

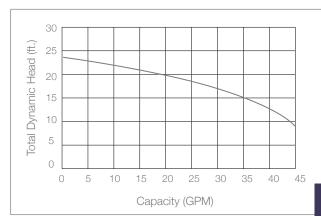


- 1. Battery box with DC charger
- 2. 1/3 HP primary pump
- 3. Ion® digital level control switch
- 4. Backup pump
- 5. Backup vertical switch
- 6. Stand (optional)

#### Primary Pump Specifications

Typical Applications	<ul><li>Residential sump</li><li>Dewatering</li></ul>
Maximum Capacity	Up to 45 GPM
Maximum Head	Up to 24'
Electrical Data	115 V, 1 Ø, 4 FLA, 60 Hz
Motor Data	1/3 HP, PSC, high efficiency motor with thermal overload protection, 3450 RPM
Recommended Minimum Basin Size	18" x 24"
Automatic Operation	i: Ion Digital Level Control
Materials of Construction	Cast iron and engineered thermoplastic
Impeller	Thermoplastic vortex
Power Cord	10' Standard
Discharge	1½" NPT
Solids Handling	1/2"

#### Pump Performance



#### Battery Backup System Features

- Primary pump with high efficiency oil filled motor that uses half the power of most 1/3 HP pumps
- Piggyback Ion digital level control primary switch with no moving parts
- High quality 2100DC battery backup pump rated for 2,100 GPH
- Backup pump base keeps the pump off the bottom of the basin to avoid clogging from debris
- Heavy duty adjustable vertical backup float switch for maximum reliability

- Solid state 8 amp charger unit with 5 charging stages automatically switches to DC mode when power is out
- Built-in audible alarm and indicator lights on charger for added protection
- Uses one 12 volt deep cycle AGM battery (battery is NOT included)
- 11/2" Sch. 40 PVC piping
- Check valve on each pump
- 3 year warranty





# **JSPIII**

#### Preassembled Sump & Battery Backup System

- All-in-one system with primary and backup pump
- Comes completely assembled with pumps and valves pre-plumbed
- Simply drop into your existing basin and make one discharge connection
- 3 year warranty



Patent No. 8,591,198

#### Preassembled Sump & Battery Backup System

#### Typical Installation Diagram

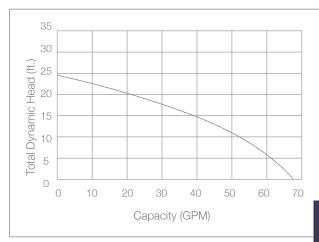


- 1. Battery box with DC charger
- 2. 1/3 HP primary pump
- 3. Ion® digital level control switch
- 4. Backup pump
- 5. Backup vertical switch
- 6. Stand (optional)

#### Primary Pump Specifications

Typical Applications	<ul><li>Basement sump</li><li>Dewatering</li></ul>
Maximum Capacity	Up to 68 GPM
Maximum Head	Up to 25'
Electrical Data	115 V, 1 Ø, 4.5 FLA, 60 Hz
Motor Data	1/3 HP, 3450 RPM
Recommended Minimum Basin Size	18" x 24"
Automatic Operation	i: Ion Digital Level Control
Materials of Construction	Cast iron & stainless teel
Impeller	Thermoplastic vortex
Power Cord	10' Standard
Discharge Size	1½" NPT
Solids Handling	1/2"

#### Primary Pump Performance



#### Battery Backup System Features

- Primary pump with high efficiency oil filled motor that uses half the power of most 1/3 HP pumps
- Piggyback Ion digital level control primary switch with no moving parts
- High quality 2100DC battery backup pump rated for 2,100 GPH
- Backup pump base keeps the pump off the bottom of the basin to avoid clogging from debris
- Heavy duty adjustable vertical backup float switch for maximum reliability

- Solid state 8 amp charger unit with 5 charging stages automatically switches to DC mode when power is out
- Built-in audible alarm and indicator lights on charger for added protection
- Uses one 12 volt deep cycle AGM battery (battery is NOT included)
- o 11/2" Sch. 40 PVC piping
- Check valve on each pump
- 3 year warranty







#### Power Pac System

- (2) 1/3 HP pumps with PSC motor
- Recommended minimum basin size: 18 x 24"
- Includes Ion Genesis® controller, 11/2" check valve Factory built; easy and quick to install and 11/2" Sch. 40 PVC piping
- Every cycle alternates to the other pump
- Low amp draw pumps 4 amps
- Each pump rated up to 2700 GPH
- Built-in alarm system
- 3 year warranty



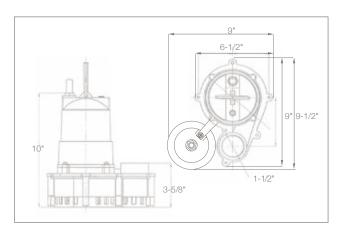


## **MPPII**

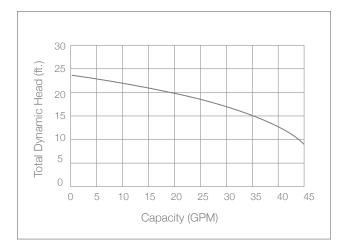
#### System Specifications

Typical Applications	Basement sump Dewatering Septic tank effluent
Maximum Capacity	Up to 45 GPM
Maximum Head	Up to 24'
Electrical Data	115 V, 1 Ø, 4 FLA, 60 Hz
Motor Data	1/3 HP, 3450 RPM
Recommended Minimum Basin Size	18" x 24"
Manual Operation	M: Manual
Materials of Construction	Cast iron & engineered thermoplastic
Power Cord	10' Standard
Discharge	1½" NPT
Solids	1/2"

#### WC33 Sump Pump Dimensions



#### WC33 Sump Pump Performance



#### Features

- Carbon ceramic mechanical seal
- Oil-filled high efficiency PSC motor that uses half the AC power of most 1/3 HP pumps
- Ion® digital level control sensors have no moving parts (standard)
- 3 year warranty







# **MPPIII**

#### Power Pac System For Sumps

- (2) 1/3 HP pumps with PSC motor
- Recommended minimum basin size: 18 x 24"
- Includes Ion Genesis® controller, 11/2" check valve Factory built; easy and quick to install and 11/2" Sch. 40 PVC piping
- Every cycle alternates to the other pump
- Low amp draw pumps 4.5 amps
- Each pump rated up to 3180 GPH
- Built-in alarm system
- 3 year warranty

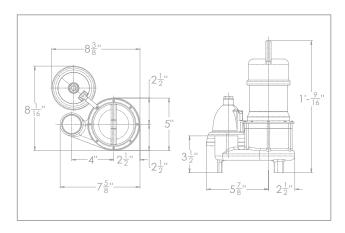




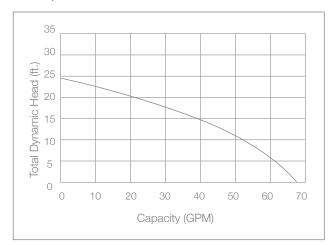
#### System Specifications

Typical Applications	Basement sump Dewatering
Maximum Capacity	Up to 68 GPM
Maximum Head	Up to 25'
Electrical Data	115 V, 1 Ø, 4.5 FLA, 60 Hz
Motor Data	1/3 HP, 3450 RPM
Recommended Minimum Basin Size	18" x 24"
Materials of Construction	Cast iron & stainless steel
Impeller	Thermoplastic vortex
Power Cord	10' Standard
Discharge Size	1½" NPT
Solids Handling	1/2"

#### Pump Dimensions



#### Pump Performance



#### Features

- Thermal overload protection
- Energy efficient motor
- Carbon ceramic mechanical seal
- Stainless steel screen prevents debris from entering the pump
- 3 year warranty





# Power+

#### Maintenance Free AGM Battery

Power+ maintenance free batteries are revolutionizing the way we power our backup systems. Simply connect a battery or batteries to your backup system without having to perform monthly maintenance. The Power+ battery is completely sealed and spill-proof with no risk of exposure to hazardous chemicals. It is safe for standard shipping anywhere in the U.S.



Accessories

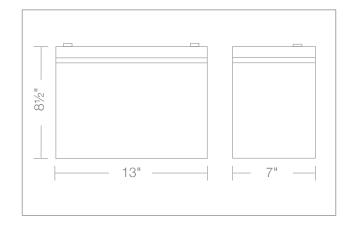
## Power+

#### Maintenance Free AGM Battery

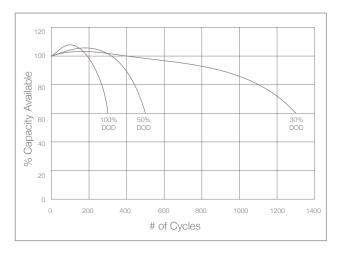
#### System Specifications

Item Number	P20397
Nominal Voltage	12 Volt
10 Hr Rate Ah	120 Ah
Model	31P-36
Size L x W x H	13" X 7" X 8½"
Weight	70 lbs
Terminal	Type B threaded copper
Bolt Size	M6 bolt

#### **Dimensions**



#### Power+ Performance



#### Features

- Maintenance free
- Lasts twice as long as typical batteries
- Completely sealed and spill-proof with no exposure to hazardous chemicals
- Safe for standard shipping in the USA
- Works with virtually all types of backup systems
- Performs up to 35% better than standard deep cycle batteries
- 3 year warranty

# **Battery Add On Kits**

#### 12 Volt Kit

- Can be used with any 12 volt battery backup system
- Adding a second battery doubles run time
- Includes12 volt group 27 or 31 single battery box with lid and 8 AWG (+) Positive and (-) Negative battery cables

#### 24 Volt Kit

- Can be used with any 24 volt battery backup system
- Adding a second bank of batteries doubles run time
- Heavy duty plastic enclosure
- Includes 24 volt group 27 and 31 double battery box with lid, 8 AWG (+) Positive and (-) Negative battery cables, and 80 Amp fuse link



# **Automatic Dialer**

#### Alarm Alert System

- Designed to be connected to our Ion Genesis® controller or home security system
- Easily set to call up to 9 different numbers to alert you to an alarm condition



## **Stands**

#### 12 Volt

- Keeps battery backup systems and batteries safe by elevating off the ground
- Heavy duty epoxy coated steel construction for durability
- For use with 12 volt group 27 and 31 battery boxes
- Works with almost all types of battery backup systems

#### Sumpro®

- Designed specifically for Sumpro®, and Sumpro® Platinum battery backup systems
- Heavy duty epoxy coated construction for durability
- Keeps Sumpro<sup>®</sup> and batteries safe by elevating off the ground
- Rubber feet avoid surface scratching







# **Under Sink Basin Package**

All parts included to install an under sink sump system

Ordering PN: MPK20293

- 1. WC33V With Vertical Switch
- 2. 1½" Check Valve
- 3. 1½" x 12" Sch. 40 PVC Discharge Pipe
- 4. Poly Water Box With Cover









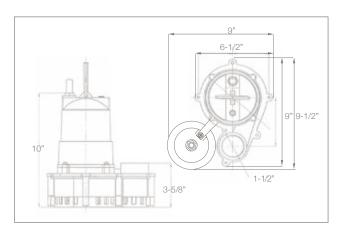




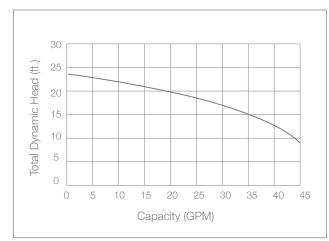
#### System Specifications

Typical Applications	<ul><li>Basement sump</li><li>Dewatering</li><li>Septic tank effluent</li></ul>
Maximum Capacity	Up to 45 GPM
Maximum Head	Up to 24'
Electrical Data	115 V, 1 Ø, 4 FLA, 60 Hz
Motor Data	1/3 HP, 3450 RPM
Automatic Operation	V: Vertical switch
Materials of Construction	Cast iron & engineered thermoplastic
Power Cord	10' Standard
Discharge	1½" NPT
Solids	1/2"

#### Pump Dimensions



#### Pump Performance



#### Features

- Carbon ceramic mechanical seal
- Oil-filled high efficiency PSC motor that uses half the AC power of most 1/3 HP pumps
- 3 year warranty





# Triple Poly Basin System 18" X 39"

Ordering PNs:

North Side Vents: TB1839TN South Side Vents: TB1839TS

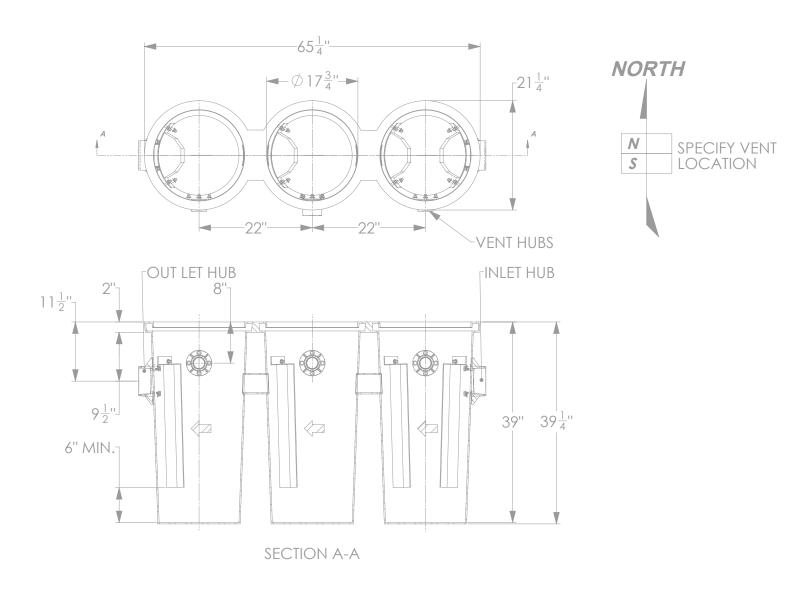
Designed to help garage areas and other facilities handle volatile wastes that they generate. Separates volatile wastes as they pass through the system of baffles and rise to the surface (meeting IL code). Includes three black epoxy-coated solid steel covers, cast iron inlet and discharge.

Larger sizes available in fiberglass. Please contact your Salesperson form more information.



# **Triple Poly Basin System**

18" X 39"



#### Features

- System of baffles
- Meets IL code
- Black epoxy-coated solid steel covers
- Cast iron inlet and discharge
- Larger sizes available in fiberglass
- 3 year warranty

# Take Control® Technologies

37 Forestwood Dr. Romeoville, IL 60446 www.ionproducts.net • (815) 886 - 9200