> Johnson Pump® **SPXFLOW**

Aqua Void Cartridge Series Bilge Pump

SUBMERSIBLE BILGE PUMP: 500 | 800 GPH 12VDC

ORIGINAL INSTRUCTIONS/TRANSLATION OF ORIGINAL INSTRUCTIONS



> Johnson Pump[®]

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Applicable standards

ISO 8846, ISO 8849, ISO 55014, ABYC-H22

Warranty Information US: SPX FLOW Inc. 5885 11th Street Rockford, IL 61109-3699 warrants to the original consumer purchaser that this product will be free from defects in material and workmanship, providing that the case is not opened or the pump otherwise abused for a period of three (3) year from the date originally purchased. The exclusive remedy of the consumer purchaser in the event the product does not meet this express Limited Warranty is to return the pump to ORIGINAL LOCATION OF PURCHASE or THE AUTHORIZED SPX FLOW JOHNSON PUMP RETAILER with your sales receipt, IMPORTANT: FOR THIS WARRANTY TO BE EFFECTIVE. THE SPX FLOW JOHNSON PUMP AUTHORIZED RETAILER MUST BE SUPPLIED WITH THE ORIGINAL PURCHASE DATE OF THE PRODUCT. THE ACCEPTANCE BY SPX FLOW JOHNSON PUMP ALITHORIZED RETAILER OF ANY PRODUCT RETURNED SHALL NOT BE DEFMED AN ADMISSION THAT SLICH PRODUCT IS DEFECTIVE OR IN VIOLATION OF ANY WARRANTY. THE COMPANY RESERVES THE RIGHT TO REPAIR OR REPLACE THE PRODUCT, NO REPRESENTATIVE OR OTHER PERSON IS AUTHORIZED TO ASSUME FOR SPX FLOW JOHNSON PUMP ANY ADDITIONAL LIABILITY IN CONNECTION WITH THE SALE OF ITS PRODUCTS OR TO ALTER THIS WARRANTY IN ANY WAY, IN NO EVENT WILL SPX FLOW JOHNSON PUMP BE LIABLE FOR MORE THAN THE SALES PRICE OF THE PRODUCT. UNDER NO CIRCUMSTANCES WILL SPX FLOW JOHNSON PUMP BE LIABLE. FOR ANY LOST PROFITS, INCIDENTAL OR CONSEQUENTIAL COSTS, EXPENSES, OR DAMAGES, THE LIMITATION ON LIABILITY FOR LOST PROFITS, INCIDENTAL OR CONSEQUENTIAL COST EXPENSES OR DAMAGES SHALL SURVIVE ANY FAILURE OF ESSENTIAL PURPOSE OF THIS LIMITED WARRANTY. Some states do not allow the exclusive or limitation of incidental or consequential damages, so the above limitation may not apply to you. NO EXPRESS OR LIMITED WARRANTY INCLUDING WARRANTY OF MERCHANTABILITY AND FITNESS SHALL EXTEND FOR ANY PERIOD OF TIME GREATER THAN THREE (3) YEARS FROM THE DATE OF ORIGINAL PURCHASE OF THIS PRODUCT. Some states do not allow limitation on how long an implied warranty lasts so the above limitation may not apply to you, CAUTION - Warranty void if seal on product is broken, if any electric cord is cut, if electric splices become submerged, or if product is installed contrary to instructions or warnings



Pump type	VOLTAGE (VDC)	500 GPH 12V	800 GPH 12V
Part. No.	12V	10-13626-01	10-13626-05

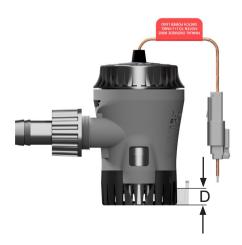
Lowest level for pumping

Measure "D"

500 - 8 mm/ 5/16"

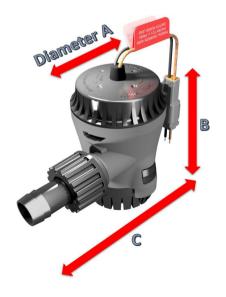
800 - 8 mm/ 5/16"

Mount in the lowest point of the bilge For longer pump life, do not run dry



> English

	500 GPH	800 GPH	Description	
1.	19 mm/ 3/4"	19 mm/ 3/4"	Hose size	
2.	ISO: 38 I/min, 600 GPH	ISO: 50 I/min, 795 GPH	Capacity, straight (12V, ISO 8849)	
2.	ABYC: 38 I/min, 600 GPH	ABYC: 50 I/min, 795 GPH	Capacity, straight (ABYC H-22)	
3.	ISO: 26 I/min, 410 GPH	ISO: 35 I/min, 560 GPH	Capacity, 1m head (12V, ISO 8849)	
J.	ABYC: 23 I/min, 365 GPH	ABYC: 32 l/min, 510 GPH	Capacity, 1m head (ABYC H-22)	
4.	ISO: 16 I/min, 250 GPH	ISO: 26 I/min, 405 GPH	Capacity, 2m head (12V, ISO 8849)	
**.	ABYC: 14 I/min, 225 GPH	ABYC: 24 I/min, 375 GPH	Capacity, 2m head (ABYC H-22)	
5.	3,0 m / 9.9 ft	4,4 m / 14.5 ft	Capacity, MAX head (12V, ISO 8849, ABYC H-22)	
6.	12V	12V	Voltage	
7.	2,7 A	3,7 A	Amperage	
8.	3,5 A	5 A	Fuse size	
9.	(B) 119 mm/4.69"	(B) 119 mm/4.69"	Height	
10.	(A) 69,8 mm/2.75"	(A) 69,8 mm/2.75"	Max. diameter	
	(C) 133 mm/5.24"	(C) 133 mm/5.24"		
11.	0,32 kg/ 11.2 oz	0,36kg/ 12.6 oz	Weight	
12.	16GA /1,3 mm ²	16GA /1,3 mm ²	Wire cross section area	



Aqua Void Cartridge Series Bilge Pump 500-800 GPH

ITEM	MATERIAL
Pump Housing	ABS
Filter Basket	ABS
Dura-Port Nut	PA66/GF - Nylon
Dura-Port Sleeves	PA66/GF - Nylon
Gasket	Nitrile Rubber
Check Valve	Nitrile Rubber
Motor Cartridge	PC-ABS
Motor Shaft	316 Stainless Steel
Shaft (Lip) Seal	Nitrile Rubber
O-ring	Nitrile Rubber
Cable	Tinned Wire

Aqua Void Cartridge Series Bilge Pump 500-800 GPH

INSTALLATION

Please follow the installation instructions carefully to assure maximum efficiency in your bilge pump operation.

- 1. Mount the pump in the lowest point of the bilge.
- Select a discharge point where the bilge water is to be pumped overboard as high as possible above the water line and at the shortest distance from the pump. Install a 19mm/3/4" thru-hull fitting.
- Fasten a 19mm/3/4" internal diameter fuel resistant hose from the pump outlet to the thru-hull discharge fitting. Avoid any sharp bends, sags or loops. Support the hose if necessary.

Electrical installation

- Connect the brown wire to an appropriate sized fuse, then to the positive (+) terminal of the battery.
- Connect the black wire to the negative (-) terminal of the battery.
- 3. Do not cut back insulation more than necessary. Insulation or cable sheathings have to be removed in such a way that they end well above the highest bilge water level. The wire connections should be sealed with a marine sealant or approved watertight connection to prevent wire corrosion.

To remove or replace motor cartridge

See page 8

- Push down and rotate the top cover in a counter clockwise direction and lift out.
- To reinstall, first make sure that the o-ring seal is properly located. Coat the o-ring seal with Food Grade Synthetic Grease (NSF H1), then align the two cams on either side of the motor cartridge with the two slots in the outer housing.
- Press down firmly and twist in a clockwise rotation until the lock-notch clicks securely into the lock groove position.

To remove or replace filter basket See page 9

- Push both retention tabs inward.
- Pull pump housing and filter basket apart while retention tabs are depressed.

INFORMATION: Bilge pump is equipped with anti-air lock feature.

ACCESSORIES

Automatic Float Switch AS888

Part. no.: 34-888 US: 26014



The automatic switch AS888 protects electrically operated pumps and gives fully automatic operation. The AS888 is made of corrosion resistant materials.

3-Way Bilge Pump Control

Part. no. 12V: 34-1224 US: 82044



The panel combined with any SPX Flow Johnson Pump automatic or mechanical switch is an excellent addition to your boat.

Ultima Switch TM - Automatic Switch

Part. no.: 34-36303 US: 36303



The Ultima Switch is used in the "Ultima Combo" pumps to provide an automatic switch with no moving parts and senses when to remove water in the bilge.

Electro-Magnetic Float Switch

Part. no. 12V: 34-1900B-12V US: 36152



The electro-magnetic float switch is the same switch as on "Cartridge Combo". As a separate accessory it is possible to attach the switch to all pumps in the SPX FLOW Johnson Pump "Cartridge" & "Heavy Duty" series.

For Installation of SPX FLOW Johnson Pump Accesories

See separate product-specific manuals

Waste handling and material recycling

At the products end of life, please dispose of the product according to applicable law. Where applicable, please disassemble the product and recycle the parts material.

Cartridge Replacement

> English

1.

Push Down



2.

Remove



3.

Reinstall

O-ring Seal



1.

Push Tabs Inwards

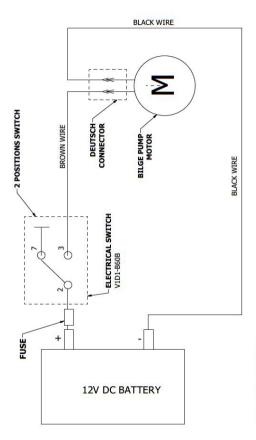




2.

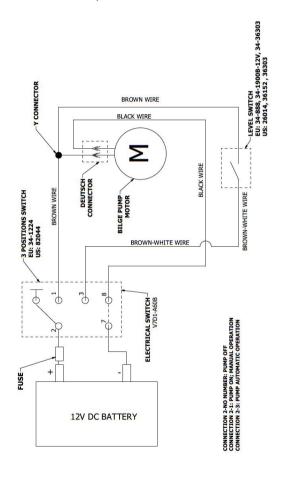
Pull Apart

Electrical installation with 2 positions switch



CONNECTION 2-7; PUMP OFF
CONNECTION 2-3; PUMP ON; MANUAL OPERATION

Electrical installation with 3 positions switch and automatic control switch



Bilge Pump Assembly Breakdown



ITEM	QTY	DESCRIPTION	
1	1	PUMP CARTRIDGE MOTOR	
2	1	PUMP HOUSING LF	
3	1	BILGE PUMP BASKET	
4	1	SMALL DURAPORT GASKET	
5	1	DURAPORT SLEEVE SMALL	
6	1	DURAPORT NUT SMALL	
7	1	SMALL DURAPORT SLEEVE - 90 DEG.	
8	1	CHECK VALVE	

CHECK VALVE

The check valve is used to reduce repetitive pump on/off cycling by preventing backflow of water from returning to the bilge. When the check valve is installed, the gasket is not required. The check valve is installed between the pump housing and duraport nut/sleeve. The protruding shape of the valve can be inserted into the duraport sleeve in the direction of water flow, which is then fastened to the pump using the duraport nut. The flat face of the valve will seal against the face of the pump threaded region when fastened together.

NOTE

Installation of the check valve can reduce performance of the pump up to 30% as it creates additional flow restriction.



ACCESSORIES

It is possible to order accesories for bilge pump. Mentioned accesories extend functions and add new possibilities for the pump. Good example of accessorie is check valve described earlier. All available accesorie sets are presented in table below:.

PRODUCT	CONTAINS	PART NUMBER.
Straight Dura Port Assembly	6 + 5 + 4	09-36422
90 Degree Dura Port Assembly	6 + 7 + 4	09-36423
Check Valve	8	09-36426



Straight Dura Port Assembly



90 Degree Dura Port Assembly



Check Valve

> English

Aqua Cartridge Replacement Motor 500-800 GPH

***Replacement Motor Cartridges Sold Separately





Type Designation

Pump type	VOLTAGE (VDC)	500 GPH 12V	800 GPH 12V
Part. No.	12V	09-36336-01	09-36336-06

Capacity and technical data for 500 and 800 GPH motors are exactly the same as data for whole bilge pump. Mentioned data can be found in table on page no.4.

Submersible Bilge Pumps CARTRIDGE 500, 800 EN

SPXFLOW

For more information on your Johnson Pump Marine product such as downloadable instruction manuals, accessories, warranty, F.A.Q. or other products and support, please visit our website by using your devices' camera or QR code reader App by hovering over the QR image below.



INSTRUCTION MANUALS



DOWNLOADS

Customer Service & Support - Johnson Pump Marine

SV +46 19 21 83 10

johnson-pump.marine@spxflow.com

US +1 800 541 1418

jp-customerservice@spxflow.com

AUS +61 03 9589 9222

ft.aus.cs@spxflow.com

For more information about our worldwide locations, approvals, certifications, and local representatives, please visit Johnson Pump - Marine at www.spxflow.com

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