



**Sensor Faucets and Flush Valves**



## **OPERATION & MAINTENANCE MANUAL**

### **HB-8000SLE Series Flush Valve**

*(includes HB8RSLE)*

[www.hydrotekintl.com](http://www.hydrotekintl.com)

5055 Forsyth Commerce Rd, Ste 124, Orlando, FL 32807

Phone (800) 922-9883 | Fax (866) 670-5580



## 8000 Series

U.S. Patent 6192530B1, 5699994

### Sensor Faucets and Flush Valves

### AC, Battery, or Solar Powered Sensor Operated Flush Valves

The Hydrotek 8000 Series Automatic Flush Valves are the most advanced, electronic flushing system in the industry today. By incorporating our field-tested electronic circuitry and slow-closing solenoid valves, Hydrotek has developed an innovative non-diaphragm, piston flushing mechanism that will provide years of dependable and trouble-free service. The Hydrotek AUTOFLUSH system is completely automatic: there is no need to contact any surface, no handle to push, and it flushes only when it is used. It provides the ultimate sanitary protection, the convenience of cleaner restroom facilities, and the most efficient system in water conservation.

- **ADA Compliant.** Meets all barrier free codes
- Conserves water and energy
- Easily installed in new or retrofit applications
- Competitively priced for today's commercial market
- Promotes cleanliness & hygiene
- Proven Hydrotek craftsmanship and reliability

**H-8000C Series (AC)**  
Complete Units



**HB-8000C Series (Battery)**  
Complete Units



**HB8RFKC Series (Battery)**  
Complete Units



**HB-8000SLE Series (Solar)**  
Complete Units



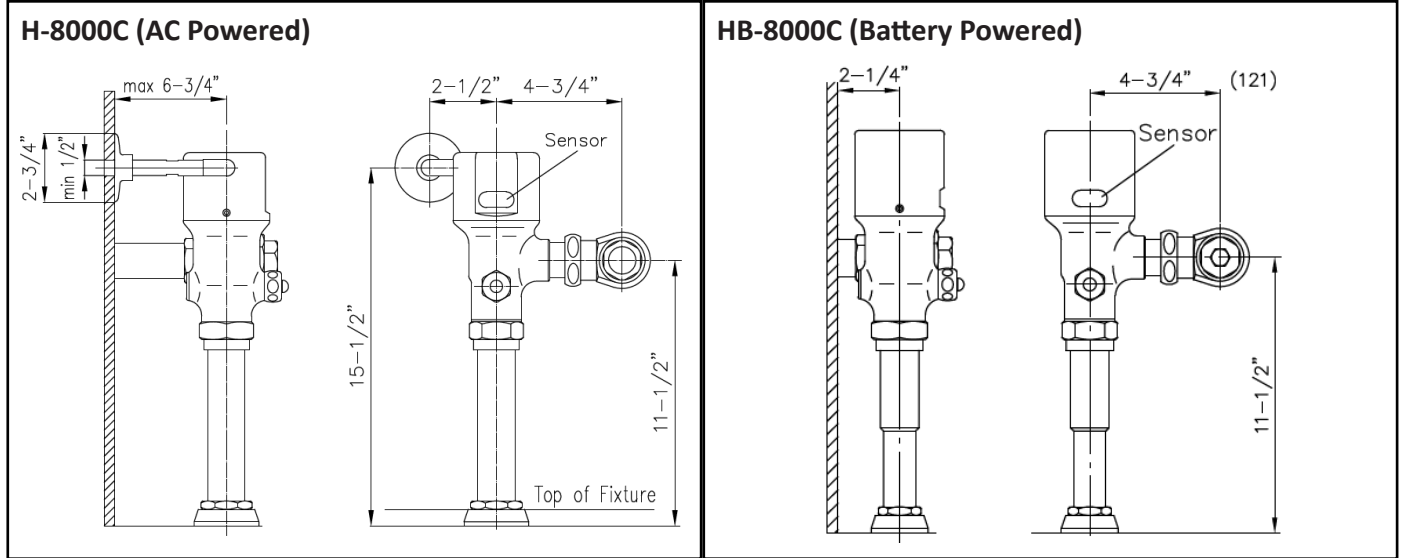
## Features:

- **ACCU-SENSE** adjustable sensor eyes
- Standard manual mechanical override button for both urinals & water closets
- Standard brass/chrome-plated, all metal construction with other finishes available
- AC/DC powered - field switchable
- Preset/adjustable flow rate and sensor distance
- Self-diagnostic electronics
- Standard vandal resistant stop valve (complete units only)
- Superior piston flushing mechanism
- Battery and Solar models are field adjustable for left and right rough-in (AC models require additional part for left rough-in)
- Battery replacement without water shut-off
- Operating pressures: 10-125 PSI
- Standard self-cleaning filtering system
- Switchable from/to urinal or closet
- 36 hour sentinel flush
- Superior VSI silicone elastomer seals, unaffected by chlorine, chloramines or ammonia
- AC with DC backup models automatically switch to batteries during a power outage
- Uses inexpensive AA batteries
- Battery service life: 400,000 on/off cycles (650,000 for the HB-8000SLE Series)
- Low battery indicator light (battery powered only)
- No outside power source required (battery powered only)
- Can be installed by one tradesperson (battery

# Hydrotek Autoflush Valves

## 8000 Series

Meets A.S.S.E. Standard 1037-89



The 8000 Series Flush Valves are available in:

### H-8000C Series (AC Powered):

- ✓ H-8000C-A (Closet)
- ✓ H-8000C-B1 (Urinal)
- ✓ H-8000C-B2 (Urinal)

*\*Water conservation, concealed and AC with DC backup models available\**

### HB-8000C Series (Battery Powered):

- ✓ HB-8000C-A (Closet)
- ✓ HB-8000C-B1 (Urinal)
- ✓ HB-8000C-B2 (Urinal)

*\*Water conservation and concealed models available\**

### HB-8000SLE Series (Solar Powered):

- ✓ HB-8000SLE-A (Closet)
- ✓ HB-8000SLE-B1 (Urinal)
- ✓ HB-8000SLE-B2 (Urinal)

*\*Water conservation and retrofit models available\**

### HB8RFKC Series Retrofit Models (Battery Powered):

Sloan & Zurn Retrofit

- ✓ HB8RFKC-C (Closet)
- ✓ HB8RFKC-U (Urinal)

Delany Retrofit

- ✓ HB8RFKC-CD (Closet)
- ✓ HB8RFKC-UD (Urinal)

*\*Water conservation models available\**

### HYDROTEK INTERNATIONAL, INC.

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www.hydrotekintl.com



### PLUMBING SPECIFICATIONS:

| Model         | Fixture   | Supply Line | Top Spud | Flow Rate   |
|---------------|-----------|-------------|----------|-------------|
| H/HB-8000C-A  | Closet    | 1"          | 1-1/2"   | 1.6 GPF     |
| H/HB-8-128    | Closet    | 1"          | 1-1/2"   | 1.28 GPF    |
| H/HB-8000C-B1 | Urinal    | 3/4"        | 3/4"     | 1.0 GPF     |
| H/HB-8000C-B2 | Urinal    | 1"          | 1-1/4"   | 1.0 GPF     |
| HB8RFKC-C/U   | Cl. & Ur. | N/A         | N/A      | 0.5-3.5 GPF |

### ELECTRICAL REQUIREMENTS:

- AC Powered Units:
  - Solenoid valve and sensor: 6V DC
  - Transformer: Input 120V AC, 60 Hz  
Output 12V DC
- Battery Powered Units
  - Solenoid valve and sensor: 6V DC
  - Battery: (4) AA Alkaline Batteries
  - Battery Service Life:
    - 400,000 flushes, up to 6 years (Battery)
    - 650,000 flushes, up to 10 years (Solar)

### BASIC PACKAGE INCLUDES:

|                    | H-8000C<br>(-A, -B1, -B2) | HB-8000C<br>(-A, -B1, -B 2) | HB8RFKC<br>(-C, -U) | HB-8000SLE<br>(-A, -B1, -B2) |
|--------------------|---------------------------|-----------------------------|---------------------|------------------------------|
| (1) Flush Valve    | ✓                         | ✓                           | ✓                   | ✓                            |
| (1) Stop Valve     | ✓                         | ✓                           |                     | ✓                            |
| (1) Sweat Kit      | ✓                         | ✓                           |                     | ✓                            |
| (1) Flush Tube     | ✓                         | ✓                           |                     | ✓                            |
| (1) Spud Coupling  | ✓                         | ✓                           |                     | ✓                            |
| (1) Vacuum Breaker | ✓                         | ✓                           |                     | ✓                            |
| (1) AC Adapter     | ✓                         |                             |                     |                              |
| (1) AC Input Tube  | ✓                         |                             |                     |                              |
| (4) AA Batters     |                           | ✓                           | ✓                   | ✓                            |

### OPTIONAL ACCESSORIES:

- HC-010 Multi-Unit Power Adapter (AC only) - 8 units
- HC-0104 Multi-Unit Power Adapter (AC only) - 4 units

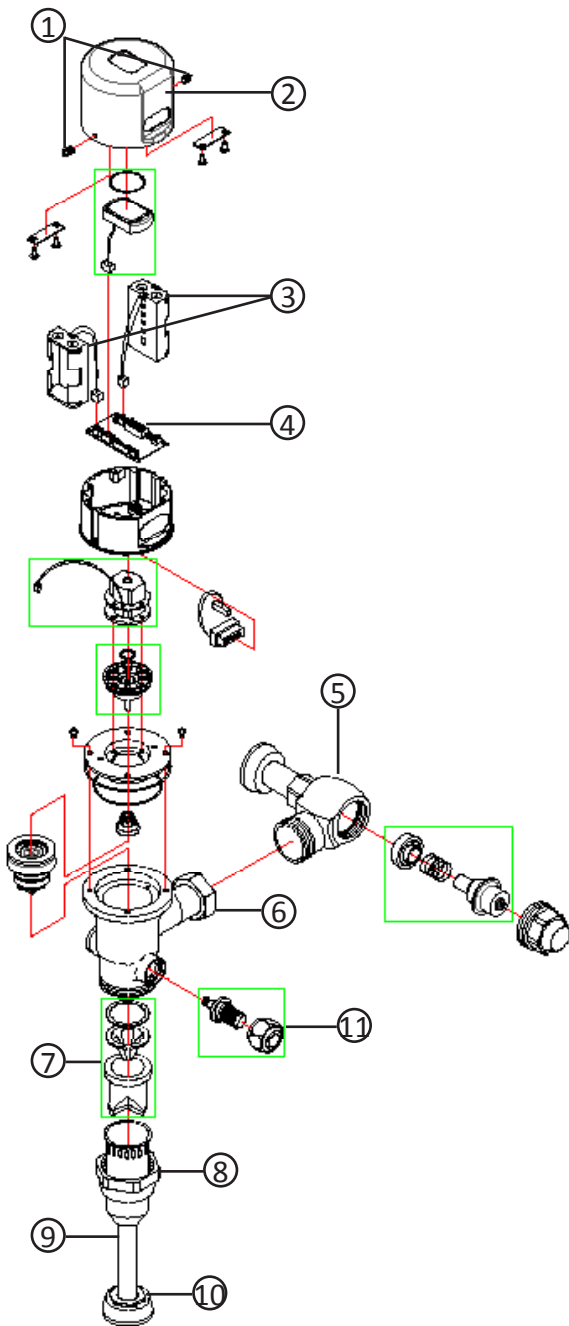
# HB-8000SLE

Solar Powered Flush Valve with Battery Backup

## Installation Instructions

### Installation Instructions:

1. Prior to installation, "DRY TEST" the unit for proper operations. Loosen the Set Screws (1) using the allen wrench provided and remove the Top Cap (2) from the valve body by pulling it straight up.
2. Properly insert 4 AA batteries into the Battery Holders (3). Push the RESET button and watch the indicator lights on the Control Module (4) for the following pattern: Red, (click), Green, Red, Red. This indicates that the electronics are functioning properly. If the indicator lights do not blink, contact the factory or your local Hydrotek representative.
3. Connect the Solar Input connector in the Top Cap (2) to the proper receptacle on the Control Module (4).
4. Reinstall the Top Cap (2) onto the valve body and tighten the Set Screws (1). Install the Stop Valve (5) to the supply line using a Hydrotek Sweat Kit (optional).
5. Connect the valve body to the Stop Valve (5) using the Slip Joint Nut (6).
6. Attach the Vacuum Breaker (7) and Tailpiece (9) to the valve body using the Lock Nut (8). Secure the Tailpiece (9) to the plumbing fixture using the provided Spud Coupling (10).
7. Turn the water on through the Stop Valve (5) and check for leaks. Push and hold the Override Button (11) for 30 seconds and check the fixture for overflow. Adjust the water flow from the Stop Valve (5) for a smoother flush.
8. TEST: Stand in front of the flush valve for 4 seconds, then step away. The valve should flush automatically. If not, refer to the Troubleshooting Guide.
9. Flow rates are preadjusted from the factory. If minor adjustments are needed, contact Hydrotek for further details.



### Parts:

- |                       |                     |
|-----------------------|---------------------|
| 1. Set Screws         | 7. Vacuum Breaker   |
| 2. Top Cap            | 8. Lock Nut         |
| 3. Battery Holder (2) | 9. Tailpiece        |
| 4. Control Module     | 10. Spud Coupling   |
| 5. Angle Stop         | 11. Override Button |
| 6. Slip Joint Nut     |                     |

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# HB-8000SLE Series

## Sensor Operated Flush Valve Troubleshooting Guide

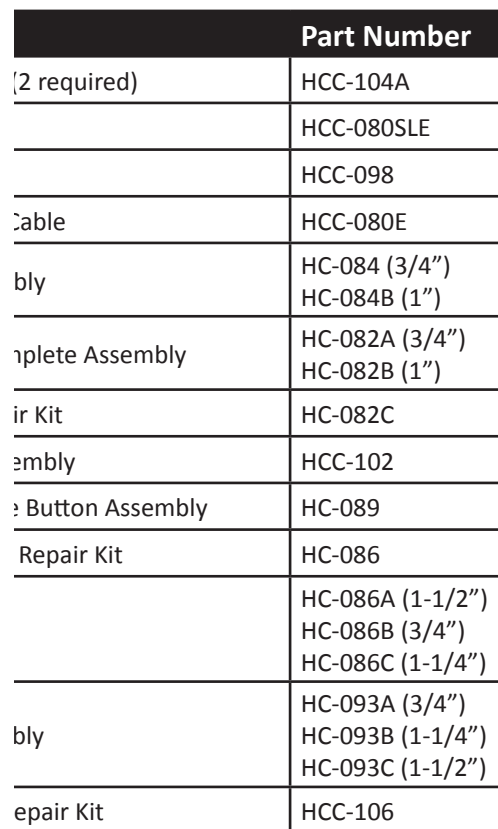
Normal Operation: When power is connected, the flush valve will immediately perform diagnostic function. You will hear a clicking sound and see lights flash. When the sensor is activated, the light will flash once and the valve will flush. The red indicator light will flash when the batteries are low.

| Problem                  | Possible Cause                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | To Diagnose                                                                                                                  | Remedy                                                   |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Valve will not turn on:  | Water not turned on                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Check water supply                                                                                                           | Turn water on                                            |
|                          | Power supply failure                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No light, no clicking: <ul style="list-style-type: none"><li>• Check batteries</li><li>• Check power adapter</li></ul>       | Reinstall or replace batteries/<br>Replace power adapter |
|                          | Low battery                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Light continues to flash                                                                                                     | Replace batteries                                        |
|                          | Electronic PCB / Sensor is defective                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No light, no clicking: <ul style="list-style-type: none"><li>• Reinsert batteries</li><li>• Reattach power adapter</li></ul> | Replace electronic PCB                                   |
|                          | Solenoid valve is clogged                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Solenoid is clicking but no water is coming out                                                                              | Clean solenoid                                           |
|                          | Solenoid coil is defective                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Insert new batteries or reattach power adapter. Light blinks but no solenoid is clicking                                     | Replace solenoid coil                                    |
| Valve will not shut off: | The solenoid valve is normally closed. Turn off water and activate the valve. If there is a clicking sound, the solenoid valve is dirty. If there is no clicking sound, then check the solenoid valve. If water is leaking through, the solenoid valve is dirty and needs to be serviced.<br><br>Other factors include: <ul style="list-style-type: none"><li>• Sensor distance is too long</li><li>• Control module is defective</li><li>• Manual override button is sticking</li></ul> |                                                                                                                              |                                                          |

**IMPORTANT:** Periodic maintenance is required for smooth and trouble-free operation of this flush valve.

*For service and inquiry about available repair kits, please call Hydrotek Technical Support at (800) 922-9883.*

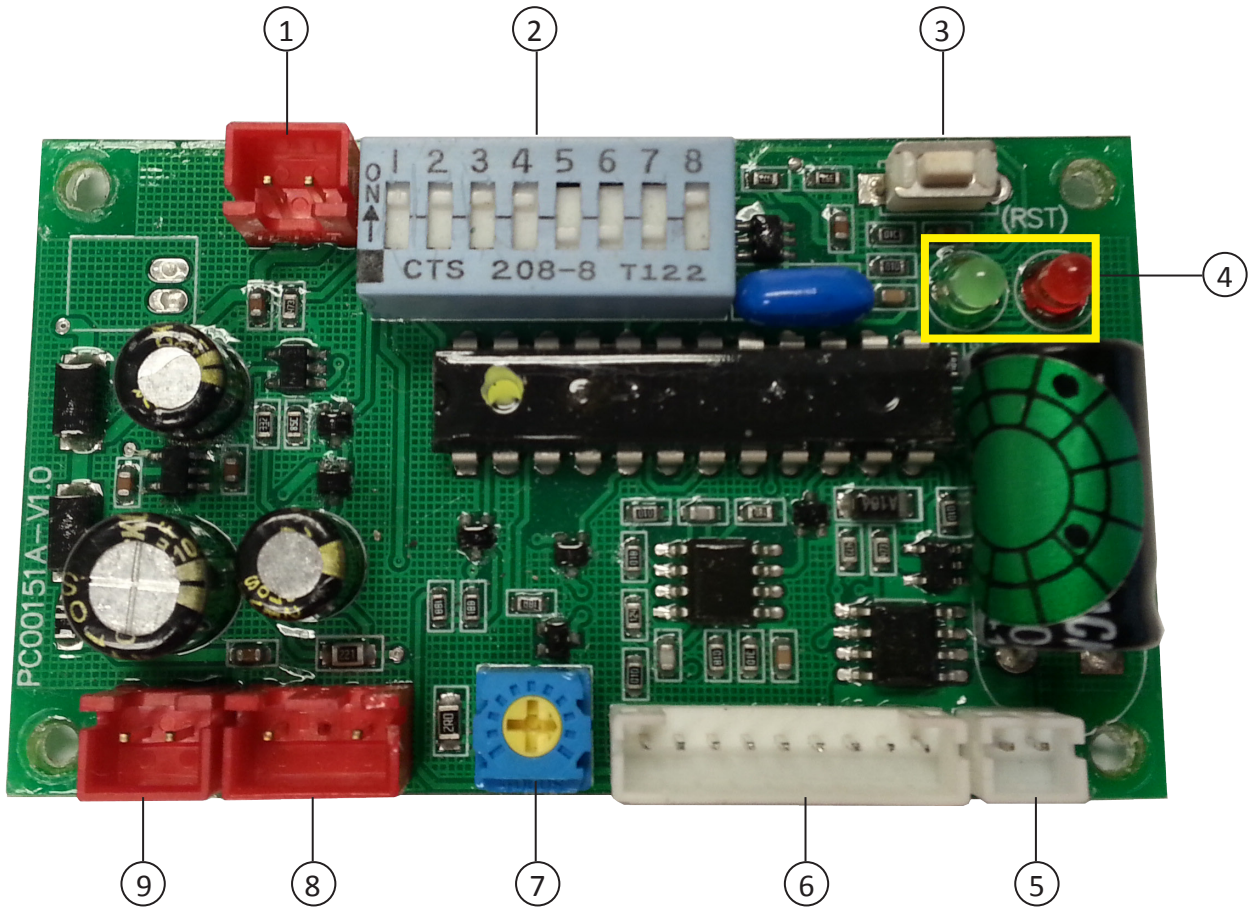
## Sensor Operated Flush Valve Assembly Parts



ir website, [www.hydrotekintl.com](http://www.hydrotekintl.com), for  
ent Products Pricing Sheet.

# HB-8000SLE Series

Sensor Operated Flush Valve  
Control Module



## LEGEND

- |                          |                                            |
|--------------------------|--------------------------------------------|
| 1. DC Input Pin Receptor | 6. Control Cable (Sensor Eye) Pin Receptor |
| 2. Dip Switches          | 7. Sensor Distance Adjustment Dial         |
| 3. Reset Button          | 8. Solar Input Pin Receptor                |
| 4. Indicator Lights      | 9. DC Input Pin Receptor                   |
| 5. Solenoid Pin Receptor |                                            |

# HB-8000SLE Series

## Sensor Operated Flush Valve Control Module Settings

Flow rate and sensor arming time can be adjusted via the dip switches located on the Control Module.

### Flushing Volume

|        | Gallons Per Flush | Sw 1 | Sw 2 | Sw 3 | Sw 4 |
|--------|-------------------|------|------|------|------|
| Urinal | 0.125*            | ON   | ON   | OFF  | ON   |
|        | 0.5               | ON   | ON   | ON   | ON   |
|        | 1.0               | ON   | ON   | ON   | OFF  |
| Closet | 1.28              | ON   | ON   | OFF  | OFF  |
|        | 1.6               | ON   | OFF  | ON   | ON   |

\*0.125 flow rate setting only available if ordered that way from the factory

Flush Valves are preset to 1.0 GPF for urinal and 1.6 GPF for closet

For alternate flow rates not listed, please contact Hydrotek direct

### Sensor Arming Time

Sensing Time Required to Flush

|        |          | Sw 5 | Sw 6 | Sw 7 | Sw 8 | Arming Time |
|--------|----------|------|------|------|------|-------------|
| Urinal | Standard | OFF  | OFF  | OFF  | ON   | 3 seconds   |
|        | Optional | ON   | OFF  | OFF  | ON   | 1.5 seconds |

|        |          | Sw 5 | Sw 6 | Sw 7 | Sw 8 | Arming Time |
|--------|----------|------|------|------|------|-------------|
| Closet | Standard | ON   | OFF  | OFF  | OFF  | 4 seconds   |
|        | Optional | OFF  | OFF  | OFF  | OFF  | 8 seconds   |

**NOTE: PUSH THE RESET BUTTON ON THE CONTROL MODULE AFTER ANY ADJUSTMENTS TO THE DIP SWITCHES.**

### Sensor Distance Adjustment

|                          |                           |
|--------------------------|---------------------------|
| <b>Clockwise</b>         | Increase sensing distance |
| <b>Counter-Clockwise</b> | Decrease sensing distance |