

## EBV-89-A

### Side Mount Operator

- ▶ **Description**  
Battery Powered, Sensor Operated Retrofit Conversion Kit for Exposed Closet and Urinal Flushometers.
- ▶ **Model**  
 EBV-89-A Water Closet (Toilet) and Urinal Side Mount Operator
- ▶ **Variations**  
(Cover type must be specified)  
 **M** Metal Cover  
 **P** Plastic Cover
- ▶ **Specifications**  
Quiet, Exposed, OPTIMA<sup>®</sup>, Battery Powered, Sensor Operated Closet and Urinal Flushometer Retrofit Conversion Kit for Sloan Flushometers with the following features:
  - ADA Compliant OPTIMA<sup>®</sup> Battery Powered Infrared Sensor for automatic “No Hands” operation
  - Chrome Plated Infrared Sensor Housing
  - Angled Sensor Window
  - Manual Override Flush Button
  - Four (4) Size C Batteries included
  - “Low Battery” Flashing LED with Optional Audio Tone
  - “User in View” Flashing LED
  - Optional 24 Hour Sentinel Flush
  - Infrared Sensor Range Adjustment Screw and Reset Button
  - Installation Tools provided
  - No External Volume Adjustment to Ensure Water Conservation
- ▶ **Handle Adaptor Kits (specify separately)**  
The SMO can be used on standard rough-in Sloan Royal, Regal, Crown and Naval brand Flushometers as well as on flush valves manufactured by Zurn and Helvex.  
When installing an SMO on a “high rough-in” valve (where the handle is more than 18” (450 mm) above the top of the fixture), an Adaptor Kit is recommended (specify separately):  
 **EBV-114** High Mount Adaptor Kit  
Handle Adaptor Kits are also required to use the SMO on the following flush valves (specify separately):  
 **EBV-157** Adaptor Kit for Sloan Gem Flushometers  
 **EBV-106** Adaptor Kit for Tempest Flush Valves  
 **EBV-107** Adaptor Kit for Teck Flush Valves  
 **EBV-113** Adaptor Kit for Crane Flush Valves  
For Coyne and Delany Flushboy Valves, use SMO model:  
 **EBV-89-M-CD** SMO for C&D Flush Valves – Metal Cover  
 **EBV-89-P-CD** SMO for C&D Flush Valves – Plastic Cover

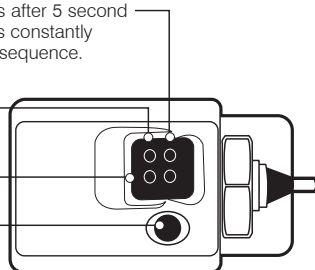
▶ **Visual Indicator Guide**

**USER-IN-VIEW L.E.D.** — Green light flashes 3 times after 5 second delay when a user is in view. The green light flashes constantly when a user is in view during the 7 minute start up sequence.

**BATTERY L.E.D.** — Yellow light flashes indicating it is time to replace batteries with four (4) new Type “C” batteries.

**OBJECT LOCK SENSOR** — Detects user or object.

**COURTESY MANUAL FLUSH BUTTON** — Allows manual activation of flush when needed.



Side Mount Operator units do NOT include a Valve Body, Supply Stop or Vacuum Breaker.

- ▶ **ADA Compliant**
- ▶ **Automatic**  
Sloan OPTIMA SMO equipped Flushometers provide the ultimate in sanitary protection and automatic operation. There is no need for AC hookups or wall alterations. The Flushometer operates by means of a battery powered infrared sensor. Once the user enters the sensor’s effective range and then steps away, the Side Mount Unit initiates the flushing cycle to flush the fixture.
- ▶ **Hygienic**  
User makes no physical contact with the Flushometer surface except to initiate the Override Button when required. Helps control the spread of infectious diseases. 24 Hour Sentinel Flush keeps fixture fresh during periods of nonuse.
- ▶ **Economical**  
Automatic operation provides water usage savings over other flushing devices. Reduces maintenance and operation costs. Installation and battery replacement does not require turning off water to the valve.
- ▶ **Warranty**  
3 year (limited)



This space for Architect/Engineer approval

Job Name \_\_\_\_\_ Date \_\_\_\_\_

Model Specified \_\_\_\_\_ Quantity \_\_\_\_\_

Variations Specified \_\_\_\_\_

Customer/Wholesaler \_\_\_\_\_

Contractor \_\_\_\_\_

Architect \_\_\_\_\_

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## Side Mount Operator

### Description

Battery Powered, Sensor Operated Retrofit Conversion Kit for Exposed Closet and Urinal Flushometers.

### Model

□ EBV-89-A Water Closet (Toilet) and Urinal Side Mount Operator

### ELECTRICAL SPECIFICATIONS

#### Control Circuit

Solid State  
6 VDC Input

#### OPTIMA Sensor Type

Infrared Convergence Type  
Object Lock Detection

#### OPTIMA Sensor Range

Nominal 8" - 54" (203 mm - 1372 mm), Factory Set at 24" (610 mm)

#### Battery Type

(4) Size C Alkaline

#### Battery Life

3 Years @ 3,000  
Flushes/Month

#### Indicator Lights

User in View/Low Battery

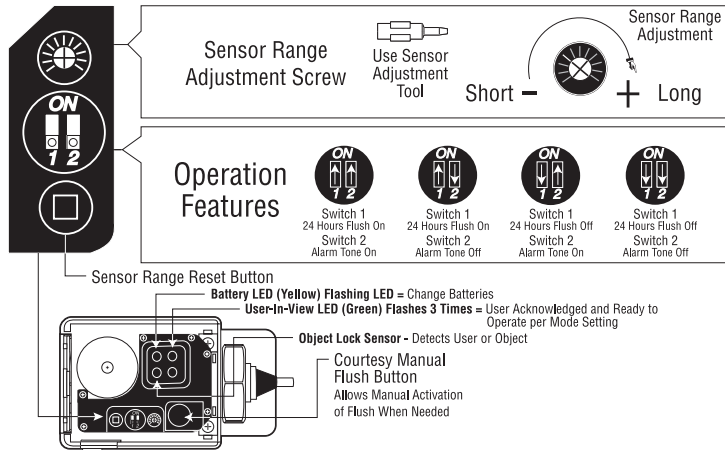
#### Operating Pressure

15-100 psi (104-689 kPa)

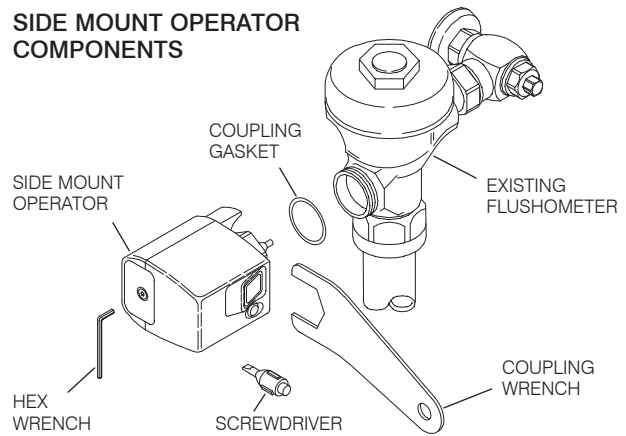
#### Operation Features

(can be turned on and off)  
24 Hour Sentinel Flush  
Audio Low Battery Tone

### FUNCTION SETTINGS

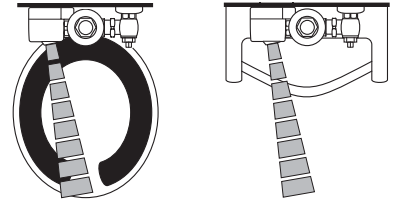


### SIDE MOUNT OPERATOR COMPONENTS

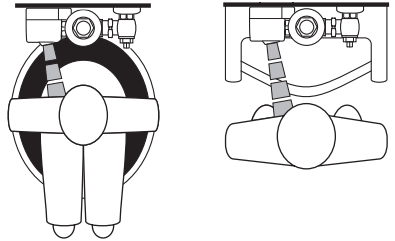


### OPERATION

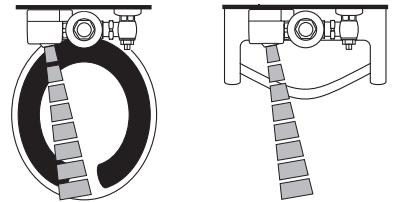
1. A continuous, invisible light beam is emitted from the Object Lock Infrared Sensor.



2. As the user enters the beam's effective range, 8" to 54" (203 mm - 1372 mm), the Object Lock Infrared Sensor senses the user.

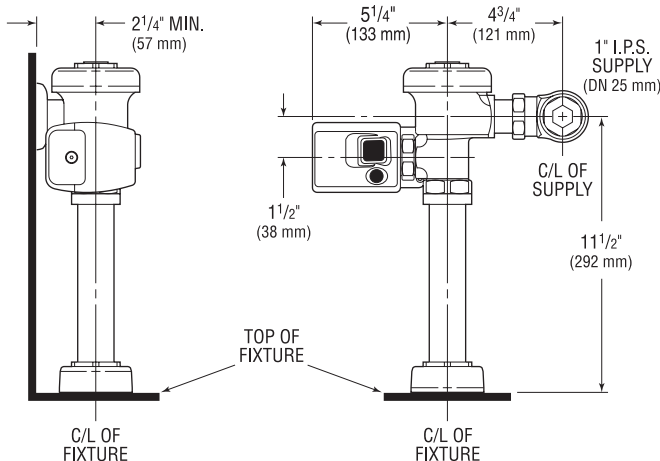


3. When the user steps away from the Object Lock Infrared Sensor, the circuit initiates the flushing cycle to flush the fixture. The circuit then automatically resets and is ready for the next user.

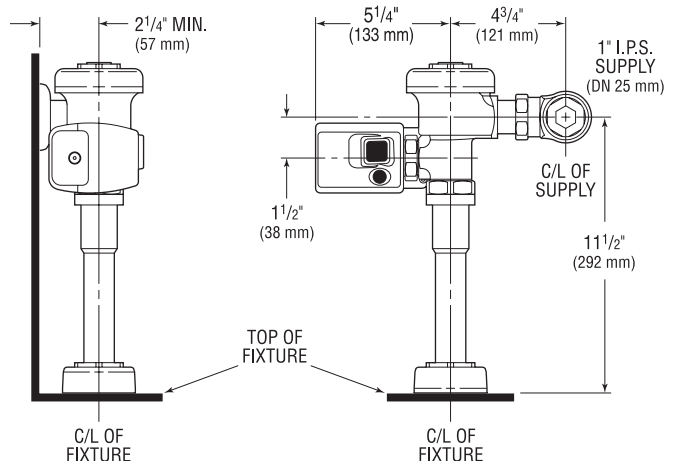


### ROUGH-IN

Side Mount Operator unit shown on an existing Sloan Regal Model 110/111 Closet Flushometer



Side Mount Operator unit shown on an existing Sloan Regal Model 180 or 186 Urinal Flushometer



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