

# 111-1.6/1.1 HW

### Description

Exposed, Hardwire, Sensor Activated Sloan ECOS® Hardwire Dual Flush Water Closet Flushometer with Smart Sense Technology™.

### Flush Cycle

Full Flush (Large Button - 1.6 gpf/6.0 Lpf) / Reduced Flush (Small Button - 1.1 gpf/4.2 Lpf)

### Specifications

Quiet, exposed, diaphragm type, chrome plated closet flushometer for either left or right hand supply (includes 9" electrical cable, right hand electrical rough-in may require 18" cable – consult factory) with the following features:

- If the user is present for less than one minute and leaves the sensing zone or chooses the small override button, a reduced flush initiates (1.1 gpf/4.2 Lpf) eliminating liquid and paper waste, saving 1/2 gallon of water
- If the user is present for greater than one minute and leaves the zone or chooses the large override button, the full flush initiates (1.6 gpf/6.0 Lpf) eliminating solid waste and paper
- Reduces water volume by up to 30% when a reduced flush occurs
- PERMEX® Synthetic Rubber Diaphragm with twin linear filtered bypass and vortex cleansing action
- Flex Tube Diaphragm designed for improved life and reduced maintenance
- ADA Compliant Sloan ECOS® Electronic Dual Flush Line Powered Infrared Sensor for automatic "No Hands" operation
- Infrared Sensor with Multiple-focused, Lobular Sensing Fields for high and low target detection
- Latching Solenoid Operator
- Engineered Metal Cover with replaceable Lens Window
- User friendly three (3) second Flush Delay
- Courtesy Flush® Override Button
- Line Powered with 6 VAC Step Down Transformer
- Infrared Sensor Range Adjustment Screw
- Initial Set-up Range Indicator Light (first 10 minutes)
- 1" I.P.S. Screwdriver Bak-Chek® Angle Stop
- Free Spinning, Vandal Resistant Stop Cap
- Adjustable Tailpiece
- High Back Pressure Vacuum Breaker Flush Connection with One-piece Bottom Hex Coupling Nut
- Spud Coupling and Flange for 1½" Top Spud
- Sweat Solder Adapter with Cover Tube and Cast Wall Flange with Set Screw
- High Copper, Low Zinc Brass Castings for Dezincification Resistance
- Fixed Metering Bypass and No External Volume Adjustment to Ensure Water Conservation
- Flush Accuracy Controlled by CID Technology
- Diaphragm, Stop Seat and Vacuum Breaker molded from PERMEX® Rubber Compound for Chloramine resistance

Valve Body, Tailpiece and Control Stop shall be in conformance with ASTM Alloy Classification for Semi-Red Brass. Valve shall be in compliance with the applicable sections of ASSE 1037. Installation conforms to ADA requirements.

### Special Finishes

- PB** Polished Brass (PVD Finish)
- BN** Brushed Nickel (PVD Finish)
- SF** Satin Chrome

### Accessories

- EL-386** Transformer Plug (120 VAC/6 VAC)
- EL-451** Transformer Box (120 VAC/6 VAC 25VA)

See Accessories Section and Sloan ECOS® Electronic Dual Flush Accessories Section of the Sloan catalog for details on these and other Sloan ECOS® Electronic Dual Flush Flushometer variations.

### Fixtures

Consult Sloan for matching Sloan brand fixture options.



### Manual Operation

Sloan ECOS® Hardwire Dual Flush Flushometers incorporate intuitive split-button design for easy manual activation. The small green button controls the reduced flush cycle (1.1 gpf/4.2 Lpf), the large button controls the full flush cycle (1.6 gpf/6.0 Lpf). Straight-forward graphics alert user to proper activation. Reduced flush for liquid waste, full flush for solid waste. To further educate the user, two (2) instructional wall plates are included with each Sloan ECOS® Flushometer.

### Automatic Operation

Sloan ECOS® Hardwire Dual Flush Flushometers can also be activated via multi-lobular infrared sensor. By detecting user presence and duration, the Sloan ECOS® Smart Sense Technology™ will determine the proper flush volume for unequalled water efficiency.

### Functional & Hygienic

Touchless, sensor operation eliminates the need for user contact to help control the spread of infectious diseases. The Sloan ECOS® Hardwire Dual Flush Flushometers are provided with *Reduced* or *Full* Flush Override Buttons to allow a "courtesy flush" for individual user comfort.

### Smart Sense Technology

The Sloan ECOS® Hardwire Dual Flush Flushometers are equipped with Smart Sense Technology™ which applies logic techniques to significantly reduce water usage without user input. If the user is present for less than one minute a reduced flush is initiated.

### Warranty

3 year (limited)

### Patented

D598,974

This space for Architect/Engineer approval	
Job Name _____	Date _____
Model Specified _____	Quantity _____
Variations Specified _____	
Customer/Wholesaler _____	
Contractor _____	
Architect _____	

### Description

Exposed, Hardwire, Sensor Activated Sloan ECOS® Hardwire Dual Flush Model Water Closet Flushometer for floor mounted or wall hung top spud bowls.

### Flush Cycle

Full Flush (Large Button - 1.6 gpf/6.0 Lpf) / Reduced Flush (Small Button - 1.1 gpf/4.2 Lpf)

### ELECTRICAL SPECIFICATIONS

#### Control Circuit

- Solid State
- 6 VAC Input
- 4.5 VAC Output
- 8 Second Arming Delay
- 3 Second Flush Delay

#### Sloan ECOS® Dual Flush Sensor Type

Active Infrared

#### Sloan ECOS® Dual Flush Sensor Range

Nominal 22" - 42" (559 mm - 1067 mm),  
Adjustable ± 8" (203 mm)

#### Indicator Lights

Range Adjustment

#### Operating Pressure

15 - 100 psi (104 - 689 kPa)

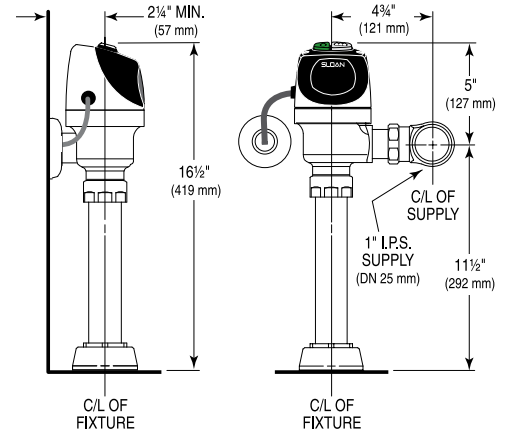
#### Sentinel Flush

Once Every 72 Hours After the Last Flush

#### Transformers

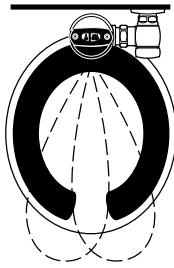
Sloan Part No. EL-386  
120 VAC, 60 Hz Primary  
6 VAC, 60 Hz Secondary  
Class II, 1/2 Amp - Plug-in Style

Sloan Part No. EL-451  
120 VAC, 60 Hz Primary  
6 VAC, 60 Hz Secondary  
Class II, 25 VA - Box Style

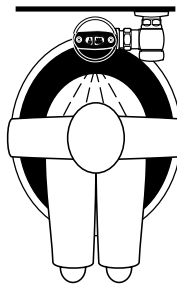


### OPERATION

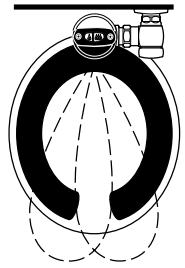
1. A continuous, invisible light beam is emitted from the Sloan ECOS® Dual Flush Sensor.



2. As the user enters the beam's effective range, 22" - 42" (559 mm to 1067 mm), the beam is reflected into the Scanner Window to activate the Output Circuit. Once activated, the Output Circuit continues in a "hold" mode for as long as the user remains within the effective range of the sensor. If the user stays longer than 65 seconds, a full flush will automatically initiate when the user leaves.

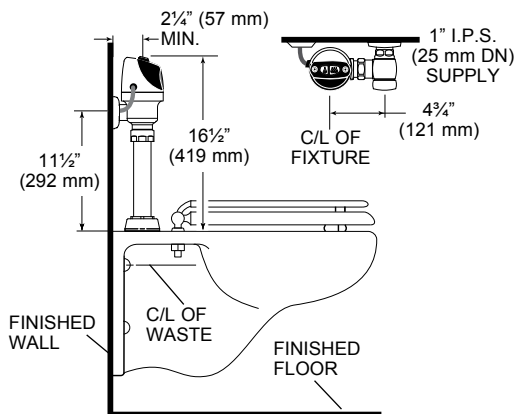


3. Once a user is detected, if the user leaves in 65 seconds or less, a reduced flush will automatically initiate. The circuit automatically resets and is ready for the next user.



### VALVE ROUGH-IN

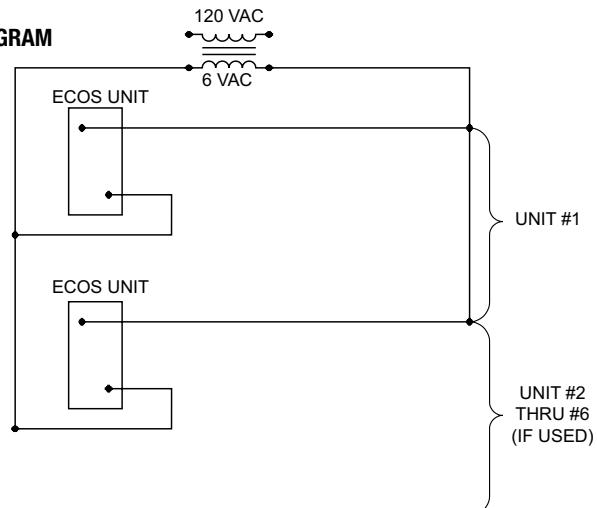
#### Model 111



#### When installing the Sloan ECOS® Hardwire Dual Flush in a handicap stall:

Per the ADA Guidelines (section 604.9.4) it is recommended that the grab bars be split or shifted to the wide side of the stall.

### WIRING DIAGRAM



One 25 VA Transformer serves up to six ECOS™ units.