Royal® Optima® Flushometers
ROYAL 115-1.6 ES-S TMO

▶ Code Number
3450310

▶ Description
Exposed, Sensor Activated Royal® Model Water Closet Flushometer with True Mechanical Override Button, for top spud bowls.

▶ Flush Cycle
1.6 gpf/6.0Lpf

▶ Specifications
Quiet, Exposed, Diaphragm Type, Chrome Plated Closet Flushometer with the following features:

- PERMEX® Synthetic Rubber Diaphragm with Dual Filtered Fixed Bypass
- Handle Packing, Main Seat, Stop Seat and Vacuum Breaker Molded from PERMEX® Rubber Compound for Chloramine resistance
- User friendly three (3) second Flush Delay
- Sweat solder adapter with cover tube and cast wall flange with set screw
- OPTIMA® EL-1500 Self-Adaptive Infrared Sensor with Indicator Light
- Non-Hold-Open True Mechanical Override
- 1" I.P.S. Screwdriver Bak-Chek® Angle Stop with Free Spinning Vandal Resistant Stop Cap
- High Back Pressure Vacuum Breaker Flush Connection with One-Piece Bottom Hex Coupling Nut, Spud Coupling and Flange for 1½" Top Spud
- Non-Hold-Open Integral Solenoid Operator, Fixed Metering Bypass and No External Volume Adjustment to Ensure Water Conservation
- Die Cast Sensor Plate with no visible Fasteners (for 2-gang Electrical Box)
- Flush accuracy controlled by CID® technology

Valve Body, Cover, 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 and ANSI/ASME 112.19.2.

▶ Variations
- Extended Bumper on Angle Stop (for seat with cover)
- Bumper on Angle Stop (for open front seat without cover)
- TP - Trap Primer

▶ Accessories (Sold Separately)
- EL-154 120 VAC/24 VAC, 50/60 Hz (50 VA) - Box Mount (will operate up to 3 faucets)
- Transformer (240 VAC/24 VAC, 50 VA) EL-342

See Accessories Section and OPTIMA® Accessories Section of the Sloan catalog for details on these and other OPTIMA® Flushometer variations.

▶ Fixtures
Consult factory for matching Sloan brand fixture options.

▶ ELECTRICAL SPECIFICATIONS
Control Circuit
- Solid State
- 3 Second Flush Delay



▶ Automatic Operation
Sloan OPTIMA® equipped Flushometers provide the ultimate in sanitary protection and automatic operation. There are no handles to trip or buttons to push. The Flushometer operates by means of an infrared sensor that adapts to its surrounding. Once the user enters the sensor's effective range and then steps away, the Flushometer Solenoid 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.

▶ Economical
Automatic operation provides water usage savings over other flushing devices. Reduces maintenance and operation costs.

▶ Practical
Solid state electronic circuitry assures years of dependable, troublefree operation. The operational components of the Flushometer are identical to a handle activated Royal® Flushometer, proven by over 100 years of experience.

▶ Compliance & Certifications
Buy American Act Compliant · UPC C ® · UL LISTED 376U

This space for Architect/Engineer Approval

▶ OPERATION

- 24 VAC Input
- 24 VAC Output

16 Second Arming Delay

Sensor Range

- Nominal 22" - 42" (559 mm - 1067 mm) Self-adaptive Window: ± 10" (254 mm)

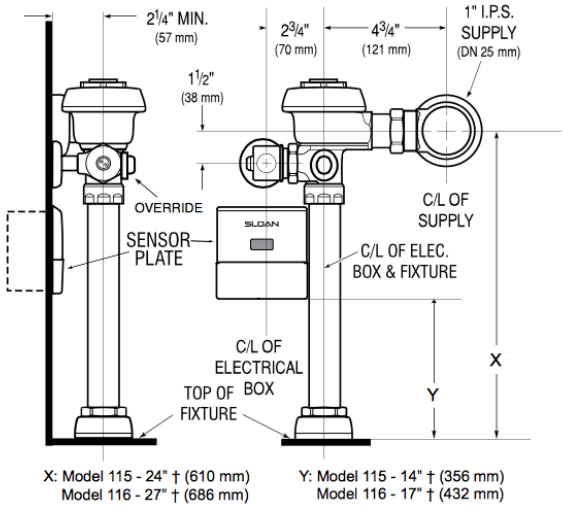
Solenoid Operator

- 24 VAC, 50/60 Hz

Transformers

- Sloan Part #EL-154 120 VAC, 50/60 Hz Primary 24 VAC, 50/60 Hz Secondary Class II, UL Listed, 50 VA.
- Sloan Part #EL-342 240 VAC, 50/60 Hz Primary 24 VAC, 50/60 Hz Secondary Class II, UL Listed, 50 VA.

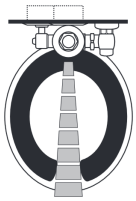
▶ ROUGH-IN



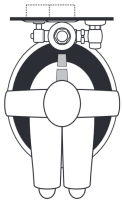
▶ WIRING DIAGRAM

One Transformer serves up to ten (10) OPTIMA Closet/ Urinal Flushometers. Specify number of transformers required accordingly.

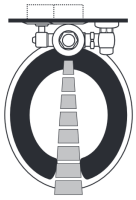
1. A continuous, invisible light beam is emitted from the OPTIMA® Sensor.



2. As the user enters the beam's effective range (22" to 42") the beam is reflected into the OPTIMA® Scanner Window and transformed into a low voltage electrical 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.



3. When the user steps away from the OPTIMA® Sensor, the circuit waits 3 seconds (to prevent false flushing) then initiates an electrical "one-time" signal that operates the Solenoid. This initiates the flushing cycle to flush the fixture. The Circuit then automatically resets and is ready for the next user.



▶ ELECTRICAL BOX INSTALLATION

