

Royal® Model OPTIMA® Sensor Activated Flushometers 190 ES-SM

Code Number

3453043

Flush Cycle

- □ 3.5 gpf/13.2 lpf
- □ 1.0 gpf/3.8 Lpf
- □ 1.5 gpf / 5.7 Lpf

Description

Concealed, Surface Mount Sensor Activated Royal® Model Urinal Flushometer, for 11/4" back spud urinals.

Specifications

- PERMEX® Synthetic Rubber Diaphragm with Dual Filtered Fixed Bypass
- Trap Primer
- Chrome Plated Exposed Flushometer Parts
- Non-Hold-Open Integral Solenoid Operator, Fixed Metering Bypass and No External Volume Adjustment to Ensure Water Conservation
- Quiet, Concealed, Diaphragm Type, Rough Brass Urinal Flushometer with the following features:
- Stop Seat and Vacuum Breaker molded from PERMEX® Rubber Compound for Chloramine Resistance
- OPTIMA® EL-461 Water Resistant (NEMA 4) Infrared Sensor with Indicator Light and 36-Inch Cord with Modular Plug
- Chrome Plated, Surface Mount Sensor Enclosure with Wall
 Gasket
- High Back Pressure Vacuum Breaker Flush Connection and Spud Coupling for 11/4" Concealed Back Spud
- Non-Hold-Open Integral Solenoid Operator w/15-Foot Cord & Modular Plug
- 1" I.P.S. Wheel Handle Bak-Chek® Angle Stop
- Flush accuracy controlled by CID® technology
- Valve Body, Cover, Tailpiece and Control Stop shall be in conformance with ASTM Alloy Classification for Red Brass. Valve shall be in compliance to the applicable sections of ASSE 1037 and ANSI/ASME 112.19.2.

Accessories (specify separately)

- □ Transformer (120 VAC/24 VAC 50 VA)
- □ Transformer (240 VAC/24 VAC 50 VA)
- 9-Foot Extension Cord with Coupling

Variations

- Matte Finish Sensor Housing
- □ 1½" Flush Connection"

Control Circuit

- Solid State
- 8 Second Arming Delay
- 24 VAC Input
- 24 VAC Output
- Solenoid Operator

24 VAC, 50/60 Hz

- ► Transformers
- Sloan Part #EL-154 120 VAC, 50/60 Hz Primary 24 VAC, 50/60 Hz



► Economical

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

► Easy Installation

The Surface Mount Sensor eliminates the need of an electrical junction box mounted in the wall. The Solenoid and Sensor easily plug into a Control Module eliminating improper wiring.

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.

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.

Water Resistant

Potted sensor and enclosure with gasket provide water resistance of a NEMA 4 rating.

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.

Compliance & Certifications

(VL)



This space for Architect/Engineer Approval

► ROUGH-IN

SLOAN 10500 SEYMOUR AVE. • FRANKLIN PARK, • IL. 60131 Ph: 1-800-9-VALVE-9 or 1-847-671-4300 • Fax: 1-800-447-8329 or 1-847-671-4380 • http://www.sloan.com



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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.

► L Dimension

Specify the "L" Dimension for the proper length of the Handle Assembly and Flush Connection. The "L" Dimension is equal to the Wall Thickness (to the nearest whole inch) plus 2³/₄" (70 mm).

Sensor Range

Adjustable Detection Range from 0 to 36 Inches (Factory set at 30 Inches) Vertically Angled 10° Down from Horizontal

Accessories (Sold Separately)

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

Made in the U.S.A.

OPERATION



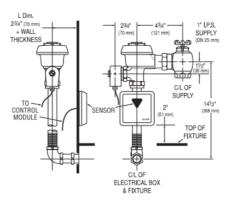
1. A continuous, invisible light beam is emitted from the OPTIMA Sensor.



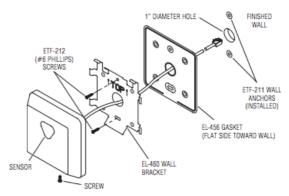
 As the user enters the beam's effective range, the beam is reflected into the OPTIMA Scanner Window and transformed into a low voltage electrical circuit. Once activated, the Output Circuit continues in a "hold" mode for as long as the user remains within the effective range of the Sensor



3. When the user steps away from the OPTIMA Sensor, the circuit immediately 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.



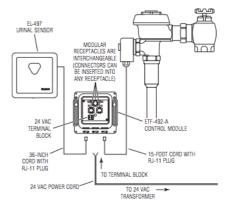
► ELECTRICAL BOX INSTALLATION



Failure to properly position the electrical boxes to the plumbing rough-in will result in improper installation and impair product performance. All tradesmen (plumbers, electricians, tile setters, etc.) involved with the installation of this product must coordinate their work to assure proper product installation. Installation Template furnished with Flushometer.

SENSOR LOCATION AND POSITIONING IS CRITICAL

WIRING DIAGRAM



One 50 VA Transformer serves up to ten (10) OPTIMA Closet/Urinal Flushometers. Specify number of transformers required accordingly.