

Sloan Optima® ES-S TMO Flushometer & Wall Hung Toilet Fixture Model 2450.1320-1.28 ES-S TMO

► Code Number

24501320

► Description

Complete system with exposed, sensor activated, Sloan® OPTIMA® ES-S TMO Flushometer & Vitreous China Wall Hung Fixture

► Flush Cycle

1.28 gpf/4.8 Lpf

► Specifications

Quiet, exposed, diaphragm type, chrome plated closet Flushometer for either left or right hand supply and vitreous china wall hung water closet with the following features:

- High Chloramine Resistant PERMEX® Synthetic Rubber Diaphragm with Linear Filtered Bypass and Vortex Cleansing Action™
- OPTIMA® EL-1500-L Self-Adaptive Infrared Sensor with Indicator Light
- Non-Hold-Open True Mechanical Override
- User Friendly Three (3) Second Flush Delay
- 1" IPS screwdriver Bak-Chek® angle stop with free spinning vandal resistant stop cap
- Spud coupling and flange for 1½" top spud
- Non-Hold-Open Integral Solenoid Operator
- Chrome Plated Wall Cover Plate (for 2-gang Electrical Box) with Vandal Resistant Screws
- High copper, low zinc brass castings for dezincification resistance
- High Back Pressure Vacuum Breaker Flush Connection with One-Piece Bottom Hex Coupling Nut, Spud Coupling and Flange for 1-1/2" Top Spud Valve Body, Cover, Tailpiece and Control Stop shall be in conformance with ASTM Alloy Classification for Semi-Red Brass. Valve shall be in compliance to the applicable sections of ASSE 1037/ ASME A112.19.2/CSA B45.1
- "Walk By" Delay of Eight (8) Seconds Prevents Unintentional Flushes
- Sweat Solder Adapter w/Cover Tube and Cast Wall Flange with Set Screw
- Diaphragm, Stop Seat and Vacuum Breaker to be molded from PERMEX® rubber compound for Chloramine resistance

► Fixture Specification

- Wall hung vitreous china elongated bowl
- Siphon jet flushing action
- 1½" IPS top spud inlet
- 2½" fully glazed trapway diameter
- Integral flushing rim with bed pan lugs
- Water spot area 11-1/4" x 8-1/2"
- Mounting hardware, carrier and toilet seat not included
- Recommended seats: Bemis - 1955CT/1955SCT & 2155CT/2155SCT
Church - 295CT/295SCT & 2155CT/2155SCT
- Water closet shall be in compliance to the applicable sections of ASME A112.19.2/CSA B45.1
- Compliant with Buy American Act when purchased as a combination

► Plumbing System Requirements

Minimum Operating Pressure: 25 PSI

Maximum Fixture Operating Pressure: 80 PSI

Minimum Operating Flow Rate: 18 GPM



► Automatic

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. Wall Box allows for vandal-proof concealed installation where pipe chase is not available or pipe space is limited.

► 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, trouble-free operation. The operational components of the Flushometer are identical to a handle activated Sloan® Flushometer, proven by over 100 years of experience.

► Compliance & Certifications



This space for Architect/Engineer Approval

► Electrical Specifications

Control Circuit

- Solid state
- 24 VAC Input/Output
- 8 second arming delay
- 24 hour Sentinel Flush

Sensor Range

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

Solenoid Operator

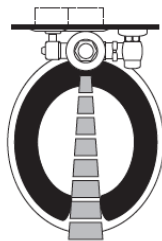
- 24 VAC, 50/60 Hz

Transformer

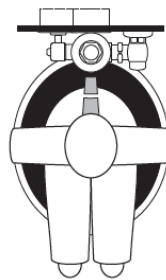
- Sloan Part #EL-154 120 VAC, 50/60 Hz Primary 24 VAC, 50/60 Hz Secondary Class II, UL Listed, 50 VA.
- Sloan Part #EL-342 240 VAC, 50/60 Hz Primary 24 VAC, 50/60 Hz Secondary Class II, UL Listed, 50 VA.

► OPERATION

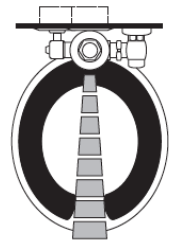
1. A continuous, invisible light beam is emitted from the Optima® sensor.



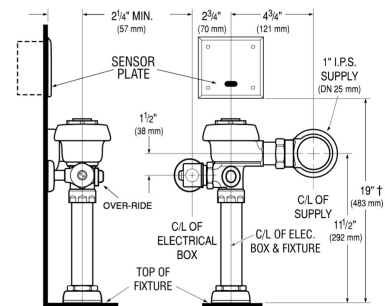
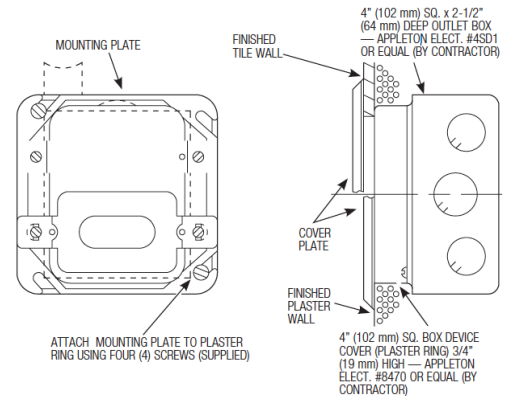
2. As the user enters the beam's effective range (22" to 42") the beam is reflected into the Optima® scanner window and transformed into a low voltage electrical circuit. Once activated, the output circuit continues in a "hold" mode for as long as the user remains within the effective range of the sensor.



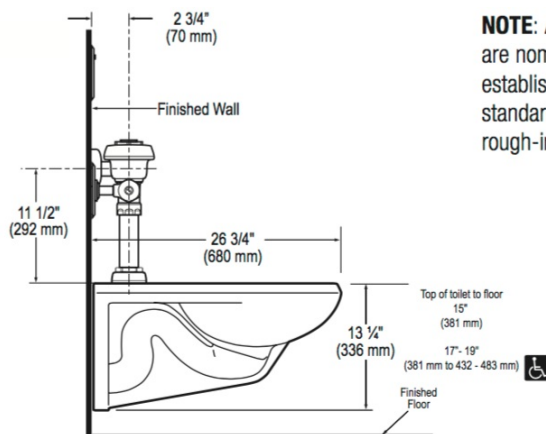
3. When the user steps away from the Optima® sensor, the circuit waits 3 seconds (to prevent false flushing) then initiates an electrical "one-time" signal that operates the solenoid. This initiates the flushing cycle to flush the fixture. The circuit then automatically resets and is ready for the next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



► ELECTRICAL BOX INSTALLATION



† Position of Sensor Box can be raised or lowered 1" (25 mm) if in conflict with Handicap Grab Bars.



NOTE: All vitreous china dimensions shown in these drawings are nominal. Dimensions can vary within the tolerances established in the governing ASME A112.19.2/CSA B45.1 standard. Please take this into consideration when planning rough-in and plumbing layouts.

