

## CODE NUMBER

3450021

## DESCRIPTION

1.28 gpf, Brushed Stainless Finish, Fixture Connection Top Spud, Single Flush, 1" Control Stop, True Mechanical Override, Hardwired, Sensor-Operated, 24V, Royal® Exposed Sensor Hardwired Water Closet Flushometer.

## DETAILS

- Flush Volume: 1.28 gpf (4.8 Lpf)
- Finish: Brushed Stainless (SF)
- Power Type: Hardwired (HW)
- Valve: Diaphragm
- Valve Body Material: Semi-red Brass
- Fixture Type: Water Closet
- Fixture Connection: Top Spud
- Rough-In Dimension: 11 ½" (292mm)
- Spud Coupling: 1 ½" (38mm)
- Supply Pipe: 1" (25mm)
- Override: True Mechanical (TMO)
- Control Stop: 1"
- Voltage: 24V

## 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
- Die Cast Sensor Plate with no visible Fasteners (for 2-gang Electrical Box)
- 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
- "Walk By" Delay of Sixteen (16) Seconds Prevents Unintentional Flushes

## VIDEOS

- ▶ ESS Flushometer
- ▶ PVD Special Finishes



## COMPLIANCES & CERTIFICATIONS



(ADA Compliant, BAA Compliant, BABAA Compliant, BREEAM Water Credit, cUPC Certified, cUPC Green Certified, Green Globes Water Credit, LEED V4 Water Efficiency Credit, Satisfies LEED Credits, UL Certified, WaterSense Listed)

## RECOMMENDED SPECIFICATION

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.

## ELECTRICAL SPECIFICATIONS

- Arming Delay: 16 seconds
- Control Circuit: Solid State/24 VAC Input/24 VAC Output
- Flush Delay: 3s
- Self-Adaptive Window: ±10
- Sensor Range: 22"-42" (559-1,067mm)
- Solenoid Operator: 24 VAC
- Transformers (specify separately):
  - 0345154
  - 0345999

## VALVE OPERATING PRESSURE (FLOWING)

15-80 PSI (103-552 kPa). Specific fixtures may require greater minimum flowing pressure - consult manufacturer requirements.

## DOWNLOADS

- [Royal ESS 110/111 Electrical Box Installation Instructions](#)
- [Royal ESS Concealed and Exposed Installation Instructions](#)
- [Royal ESS TMO Installation Instructions](#)
- [Royal 110/111/180/186 ESS TMO \(Spanish\) Installation Instructions](#)
- [Control Stop Repair and Maintenance Guide](#)

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- [Flush Connections Flanges Repair and Maintenance Guide](#)
- [Tail Piece Repair and Maintenance Guide](#)
- [Optima ESS Repair and Maintenance Guide](#)
- [Optima ESS TMO Exposed Repair and Maintenance Guide](#)
- [Additional Downloads](#)

#### NOTES

All information contained within this document subject to change without notice.

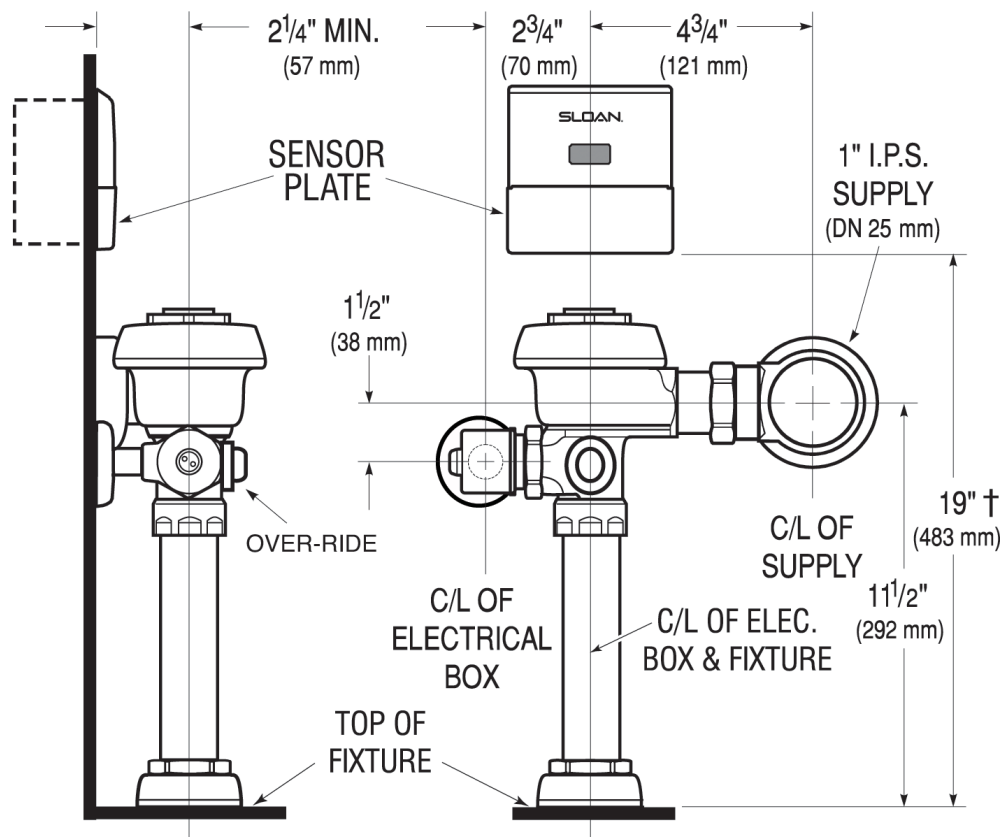
Looking for other variations of the ROYAL 111 ESS product?  
[View the general spec sheet with all options.](#)

WaterSense compliant when used with a WaterSense compliant fixture

#### WARRANTY

[View Warranty Information](#)

#### ROUGH-IN



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