

## CODE NUMBER

3451109

## DESCRIPTION

1.6 gpf, Rough Brass Finish, Fixture Connection Rear Spud, Single Flush, 2-10.75 L Dimension, Hardwired, Sensor-Operated with Modular Plug, 24V, Royal® Concealed Sensor Hardwired Water Closet Flushometer.

## DETAILS

- Flush Volume: 1.6 gpf (6.0 Lpf)
- Finish: Rough Brass
- Power Type: Hardwired
- Valve: Diaphragm
- Valve Body Material: Semi-red Brass
- Fixture Type: Water Closet
- Fixture Connection: Rear Spud
- Rough-In Dimension: 14 ½" (368mm)
- Spud Coupling: 1 ½" (38mm)
- Supply Pipe: 1" (25mm)
- L Dimension: 2" - 10 ¾" (51-273mm)
- Voltage: 24V

## FEATURES

- PERMEX® Synthetic Rubber Diaphragm with Dual Filtered Fixed Bypass
- Non-Hold-Open Integral Solenoid Operator, Fixed Metering Bypass and No External Volume Adjustment to Ensure Water Conservation
- Stop Seat and Vacuum Breaker molded from PERMEX® Rubber Compound for Chloramine Resistance
- High Back Pressure Vacuum Breaker Flush Connection and Spud Coupling for 1 1/2" Concealed Back Spud
- OPTIMA® EL-461 Water Resistant (NEMA 4) Infrared Sensor with Indicator Light and 36-Inch Cord with Modular Plug
- User friendly adjustable 2 to 6 second Flush Delay
- Water-Resistant (NEMA 4) Courtesy Flush® Override Button
- Non-Hold-Open Integral Solenoid Operator with 15-Foot Cord and Modular Plug
- Chrome Plated, Surface Mount Sensor Enclosure with Wall Gasket
- 1" I.P.S. Wheel Handle Bak-Chek® Angle Stop

## VIDEOS

- ▶ [ESS Flushometer](#)



## COMPLIANCES & CERTIFICATIONS



(ADA Compliant, BAA Compliant, cUPC Certified, UL Certified, UPC Certified)

## 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: 8 seconds
- Control Circuit: Solid State/24 VAC Input/24 VAC Output
- Flush Delay: 2-6s
- Sensor Range: 0"-36" (0-914mm)
- 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 152/195 ESS TMO Installation Instructions](#)
- [Royal ESS Concealed and Exposed Installation Instructions](#)
- [Royal ESS Installation Instructions](#)
- [Control Stop Repair and Maintenance Guide](#)
- [Flush Connections Flanges Repair and Maintenance Guide](#)
- [Tail Piece Repair and Maintenance Guide](#)
- [Optima ESS Repair and Maintenance Guide](#)
- [Optima ESS TMO SWB Concealed Repair and Maintenance Guide](#)
- [Optima ESS TMO Exposed Repair and Maintenance Guide](#)
- [Flushometer Pressure gauges](#)
- [Additional Downloads](#)

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**NOTES**

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

Looking for other variations of the ROYAL 140 ESS product?  
[View the general spec sheet with all options.](#)

**WARRANTY**

[View Warranty Information](#)

**ROUGH-IN**

