



Royal® Sensor Flushometer

ROYAL 113 ESS-1.6-CP-TMO-HW-24V

Product description

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

Compliances & Certifications



(ADA Compliant*, BAA Compliant, BABAA Compliant, IAPMO, UL Certified (US), cUPC Certified)

Code 3450265

Finish

 Polished Chrome (CP)

Downloads

- [Royal ESS Concealed and Exposed Installation Instructions.pdf](#)
- [Royal ESS TMO Installation Instructions.pdf](#)
- [Control Stop Repair and Maintenance Guide.pdf](#)
- [Flush Connections Flanges Repair and Maintenance Guide.pdf](#)
- [Tail Piece Repair and Maintenance Guide.pdf](#)
- [Retrofits Brochure.pdf](#)
- [Additional Downloads](#)

Videos

- [ESS Flushometer](#)

Product Information

Details

- Flush Volume: 1.6 gpf (6.0 lpf)
- Finish: Polished Chrome (CP)
- Power Type: Hardwired (HW)
- Valve: Diaphragm
- Valve Body Material: Semi-red Brass
- Fixture Type: Water Closet
- Fixture Connection: Top Spud
- Rough-in Dimension: 16" (406mm)
- Spud Coupling: 1.5" (38mm)
- Supply Pipe: 1" (25mm)
- Override: True Mechanical (TMO)
- Control Stop: 1"
- Voltage: 24V (24V)

Features

- Flush volumes start as low as 1.28 gpf/4.8 Lpf
- Water conservation is aided by the ADA-compliant, non-hold-open handle, which prevents toilet from exceeding intended flush volume
- Flush accuracy is controlled by CID™ technology, also enhancing water efficiency
- Integrity of the product is maintained with the vandal-resistant stop cap
- Durability is facilitated with high copper, low zinc brass castings for dezincification resistance
- Adjustable tailpiece
- PERMEX® Synthetic Rubber Diaphragm with Dual Filtered Fixed Bypass
- Valve body, Cover, Tailpiece and Control Stop shall be in compliance with ASTM Alloy Classification for Semi-Red Brass
- Valve shall be in compliance to the applicable sections of ASSE 1037

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Recommended specifications

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: 3 seconds
- Sensor Range: 22"-42" (559 - 1067mm)
- Self-Adaptive Window: ±10"
- Solenoid Operator: 24 VAC
- Transformers (Specify Separately):
 - EL-154/0345154
 - EL-342/0345999

Valve Operating Pressure (Flowing)

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

Warranty

[View Warranty Information](#)

Notes

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

*Compliant with ADA accessibility requirements when installed according to ADA standards.

Looking for other variations of the ROYAL 113 ESS product? [View the general spec sheet with all options.](#)

[Find a compatible urinal](#) for this flushometer.

[Find a compatible water closet](#) for this flushometer.

