



Royal® Sensor Flushometer

ROYAL 186 ESS-1.0-GR-TMO-HW-24V

Product description

1.0 gpf, Graphite Finish, Fixture Connection
Top Spud, Single Flush, 3/4" Control Stop, True
Mechanical Override, Hardwired, Sensor-Operated,
24V, Royal® Exposed Sensor Hardwired Urinal
Flushometer.

Compliances & Certifications



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

Code 3452664

Finish



Downloads

- [Royal ESS TMO Installation Instructions.pdf](#)
- [Royal ESS Concealed and Exposed Installation Instructions.pdf](#)
- [Control Stop Repair and Maintenance Guide.pdf](#)
- [Flush Connections Flanges Repair and Maintenance Guide.pdf](#)
- [Flushometer Pressure Gauges.pdf](#)
- [Special Finishes Brochure.pdf](#)
- [Additional Downloads](#)

Videos

- [ESS Flushometer](#)

Details

- Flush Volume: 1.0 gpf (3.8 lpf)
- Finish: Graphite (GR)
- Power Type: Hardwired (HW)
- Valve: Diaphragm
- Valve Body Material: Semi-red Brass
- Fixture Type: Urinal
- Fixture Connection: Top Spud
- Rough-in Dimension: 11.5" (292mm)
- Spud Coupling: 0.75" (19mm)
- Supply Pipe: 0.75" (19mm)
- Override: True Mechanical (TMO)
- Control Stop: 3/4"
- Voltage: 24V (24V)

Features

- Sensor-activated, hardwired urinal flushometer
- PERMEX® Synthetic Rubber Diaphragm with Dual Filtered Fixed Bypass
- Durability is facilitated with high copper, low zinc brass castings for dezincification resistance
- Adjustable tailpiece
- Critical components, including cover, valve body, control stop and sweat solder kit, are made of semi-red brass
- 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

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. Valve Body, Cover, Tailpiece and Control Stop shall have a PVD Graphite finish.

Electrical specifications

- Arming Delay: 8 seconds
- Control Circuit:
 - Solid State
 - 24 VAC Input
 - 24 VAC Output
- Flush Delay: 1 seconds
- Sensor Range: 15"-30" (381 - 762mm)
- Self-Adaptive Window: ±8"
- 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.

WaterSense compliant when used with a 1.0 gpf (3.8 lpf) WaterSense fixture.

Looking for other variations of the ROYAL 186 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.

