



**Royal® Sensor Flushometer**

**ROYAL 186 ESS-0.5-CP-TMO-24V**

**Product description**

0.5 gpf, Polished Chrome 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, BREEAM Water Credit, cUPC Green Certified, Green Globes Water, IAPMO, LEED Water, Satisfies LEED Credits, UL Certified, USA, EPA WaterSense Listed)

**Code 3452642**

**Finish**

-  Polished Chrome (CP)

**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: 0.5 gpf (1.9 lpf)
- Finish: Polished Chrome (CP)
- 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.

## 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.

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.

WaterSense compliant when used with a 0.5 gpf (1.9 lpf) WaterSense fixture.

