



Upgrading Manual Flushometers to Touch-free Sensor Operation

Presenters



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Agenda

This presentation will cover:

- Hygiene fundamentals
- Why “high-touch” surfaces can be risky
- The market response to “touch-free” options
- Variations in retrofit kits for converting manual flushometers to touch-free sensor operation
 - How to select the best options for your facility
 - How to avoid making the wrong choices for your facility



Hygiene Fundamentals

Germs/microbes are either bacterial or virus in nature

- Bacterial infections reproduce by themselves
- Viral infections must have host cells to replicate

They reproduce in the body which tries to eliminate them

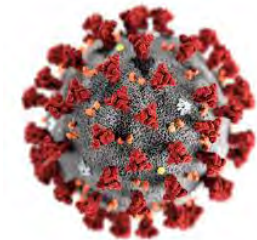
- Coughing, sneezing, inflammation & immune system

Germs spread after they have been left on a surface and then touched by a healthy person

- “High-touch” surfaces are those that many people touch throughout a day
- Flushometer & faucet handles are “high-touch”



E-Coli (Bacteria)



COVID-19 (Virus)

COVID-19 is 64x
smaller than E-Coli

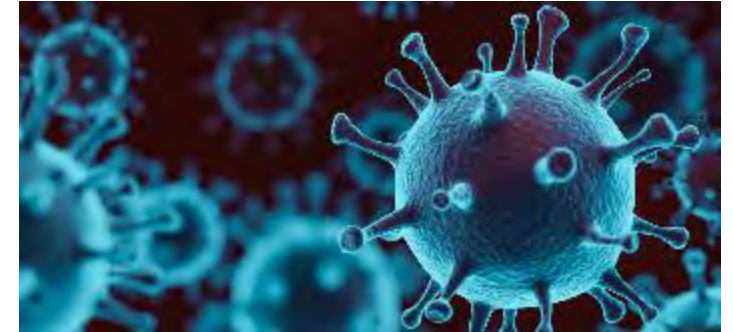


Why ‘High-Touch’ Surfaces can be Risky

“Surface areas in general are reservoirs for viruses, bacteria, and other germs, when you sneeze into the environment, the respiratory particles can land on surfaces.

Simply touching a contaminated surface won’t give you COVID-19, but then touching your mouth, nose, or eyes can transfer the virus to those sensitive spots, allowing the virus to enter the body and cause infection.”

Manish Trivedi, M.D., Director, Division of Infectious Diseases and Chairman of Infection Prevention and Control, AtlantiCare Regional Medical Center, NJ



Reducing contact with potentially contaminated surfaces is a proven method for reducing infection.

The Market Associates ‘Touch-Free’ with ‘Safer’

“We have installed, or are in the process of installing, hands-free faucets and self-flushing toilets and urinals at all city facilities.”

City of Fayetteville, NC



Designing Office Building Lobbies to Respond to the Coronavirus

“Touch-free design solutions and air purifiers can enhance workplace wellness.”

*J. Kevin Heinly, Gensler
Research and Insight*

Activation Options

Manual Activation

- Most popular
- Simple, intuitive, and durable
- Requires physical hand touch



Sensor Activation

- Sensor activated flushometers use infrared (IR) technology
 - Detects user and flushes when they leave
- Flushes as programmed
- Touch not required



Mounting Options

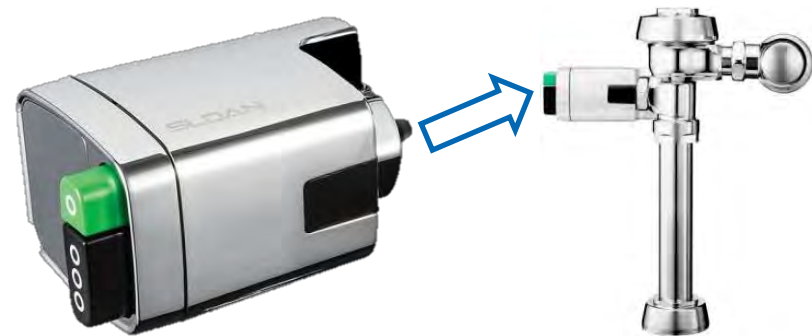
Top Mount

- More options
- Replaces cover and diaphragm assembly
- Water supply shut-off required
- Flush volume can be changed
- Battery or solar powered (4 “AA” batteries)
- **5-7 minute conversion time**



Side Mount

- Most popular
- Replaces or fits over handle assembly
- Water supply shut-off not required
- Flush volume stays the same
- Battery powered (4 “C” batteries)
- **1-5 minute conversion time** (depending on model)



Useful Acronyms to Know

Top Mounts



RESS



Retrofit Electronic Solenoid Sensor



MC



Metal Cover

Side Mounts



SFSM



Single Flush Side Mount



DFSM



Dual Flush Side Mount



SMOOTH



Side Mount Operator – Over the Handle



SMO



Side Mount Operator

TMO

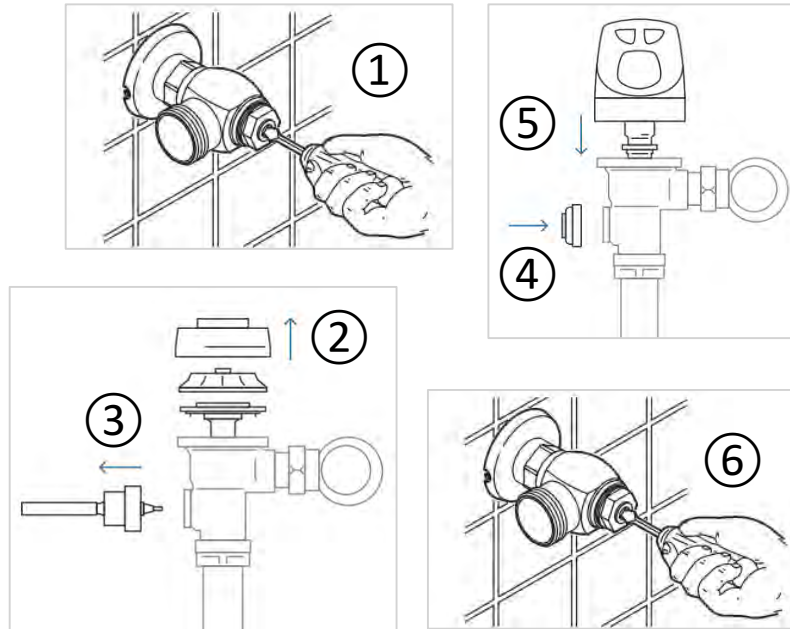


True Mechanical Override

Top Mount RESS Installation

1. Shut off water
2. Remove outer & inner cover & diaphragm assembly
3. Install handle cover
4. Install RESS assembly
5. Turn water back on

Click to watch [Sloan ECOS Retrofit Installation](#) video



Top Mount Retrofit Kits

Average 5 – 7 min installation time



	SLOAN	MC	G2	ECOS	SOLIS
Flush volume – Closet (gpf)	1.28 to 4.5	1.28 to 1.6	1.6 to 4.5	1.28 & 1.6/1.1	1.28 to 3.5
Flush volume – Urinal (gpf)	0.125 to 1.5	0.125 to 1.0	0.25 to 1.5	0.125 to 0.5	0.125 to 1.5
“Stadium Flush” (urinals)				X	X
Cover Material	Plastic	Metal	Metal/Plastic		Metal/Plastic
Power					
4 AA Alkaline Batteries	X	X	X		X
Override Button	X	X	X		X
Diaphragm Bypass Filter	Linear	Dual	Dual		Dual
Battery Life	4 - 6 yrs	4 - 6 yrs	4 - 6 yrs		6 - 8 yrs

Which Top Mount Kits for Which Application?

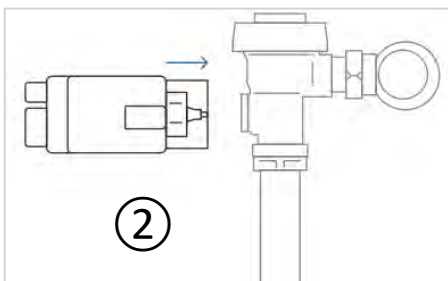
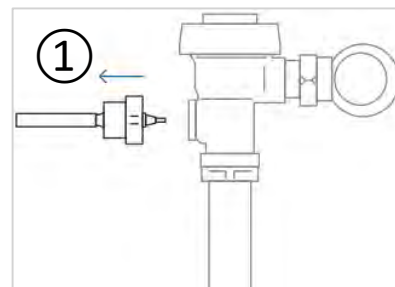


	SLOAN	MC	G2	ECOS	SOLIS
Positioning	Good	Better	Better	Better	Best
Budget	\$	\$\$	\$\$	\$\$	\$\$\$
Dual Flush				X	X
Vandal Resistance		X	X	X	X
Sediment resistance			X	X	X
High Traffic				X	X
Battery Life					
Buy America Act (BAA)	X	X	X	X	X

Side Mount Installation

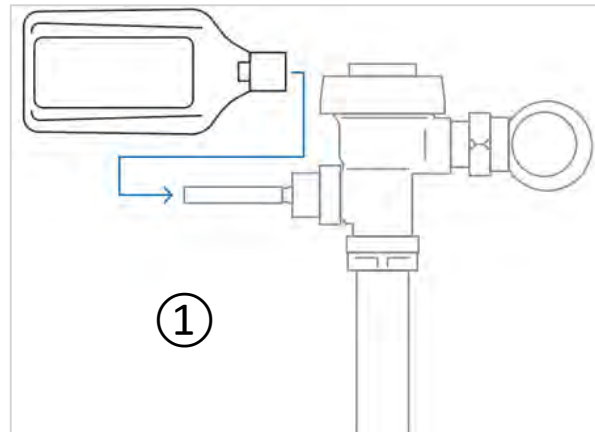
1. Remove handle
2. Install SFSM or DFSM

[Click to watch Sloan SFSM Dual Flush Side Mount Retrofit Installation video](#)



SMOOTH Side Mount Installation

1. Clamp SMOOTH over the existing handle



Side Mount Retrofit Kits



	SMO	SMOOTH	SFSM/DFSM
Model	EBV-89-A	EBV-200-A	EBV-500-A/550-A
4 “C” Alkaline Batteries	X	X	X
Battery Life	3 yrs	2-3 yrs	3 yrs
Override	Electronic	TMO	TMO
Dual Flush	-	-	DFSM
Installation	Replaces handle	Over the handle	Replaces handle
Low Battery Indicator	X	X	X
Estimated Installation Time	3 – 5 Min.	1 – 3 Min.	3 – 5 Min.

What is TMO?

T rue Mechanical Override

- When batteries are depleted and the sensor no longer operates the units can still be flushed manually
- “Non-Hold Open” design prevents intentional flooding



SMOOTH



SF5M



DF5M

Which Side Mount Kits for Which Application?



	SMO	SMOOTH	SF5M	DF5M
Positioning	Good	Better	Best	Best
Budget	\$	\$\$\$	\$\$	\$\$
Easiest/Fastest Installation		X		
True Mechanical Override (TMO)		X	X	X
Dual flush				X
Battery Life				
Ease of service			X	X
Flushometer Compatibility	ALL	No GEM	ALL	No Piston

Success Stories

Globe Life Field (Texas Rangers)

Arlington, TX

- Selected SFSMs
- Met budgeting constraints
- Specification required a true mechanical override



Success Stories

Sprint Center

Kansas City, MO

- Selected SMOs
- Liked the compact size and look
- Upgraded manual GEMs and Regals



Success Stories

University of Wyoming

Laramie, WY

- Selected SMOOTH
- Liked the true mechanical override and ease of install



Success Stories

Blue Cross Blue Shield Tower

Chicago, IL

- Selected G2 Top Mount RESS-U and RESS-C
- Chosen for looks and functionality



Product Selection Best Practices

1. Match the retrofit kit flush volume to the flush volume of the fixture
2. Flush volumes must be specified when ordering top mount kits
3. Side mount kits don't alter flush volume unless parts ordered separately
4. If the facility is LEED certified, ensure that selections are compliant



Key Special Features or Options

- All Sloan manual flushometers can be upgraded



- Solar energy harvesting can extend battery life up to two additional years



- True Mechanical Override (TMO) provides customer peace of mind



Summary

- “Touch-free” is best practice to avoid transmission of disease
- The market is reacting and demanding touch-free
- Retrofit kits are the fastest way to convert manual operation to touch-free sensor
 - Top mount retrofit kits are attractive, have many options, and can be installed in 5 – 7 minutes
 - Side mount retrofit kits are affordable and can be installed in 1 – 5 minutes



Questions?

Training Comments, Questions, or Suggestions?

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