

# How to extend the life of a flushometer: preventative vs. reactive maintenance

There are tens of millions of manual flushometers active in the U.S. alone. Flushometers must pass strict industry tests of 250,000 flushes. But in a busy commercial restroom at 4,000 flushes per month, this only translates to five years of service. The brass parts of a flushometer can last for decades, but that doesn't mean that the internal parts don't need some maintenance along the way. Rather than waiting until symptoms appear, why not get ahead of the curve and head off maintenance issues before they start.

Most commercial plumbers and facility maintenance personnel are stretched very thin these days. Juggling a heavy workload that many times includes multiple locations. This means their flushometer maintenance is generally reactive — the result of a leak or a user complaint about the toilet or urinal not flushing. This means wasted water and unhappy users. In a perfect world, maintenance would be preventative instead of reactive, heading off problems before they occur.



Preventative maintenance is centered around the idea of regularly checking and servicing a flushometer as it progresses through its life cycle. Think about your automobile owner's manual, which includes recommendations for various service activities at regular intervals. Why can't the same type of approach work for flushometers?

Just like a car, predicting the life cycle of the internal parts is difficult for a flushometer. There are many environmental and unique factors that can impact a flushometer's wear over time.



## Water quality

In particular, high levels of chlorine or excessive dirt and debris can gradually wear a product and part down over time.



#### **High traffic**

Higher levels of use contributes to a shorter life cycle.



#### Vandalism and abuse

Destructive abuse of the flushometer, such as kicking the handle, will lead to negative impacts on a flushometer's life cycle.



## **Proper installation**

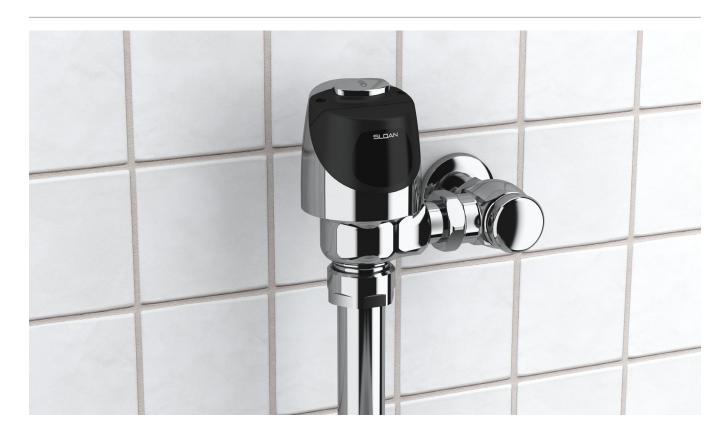
Improper installation of a flushometer can affect performance and product life from the onset.



## Proper parts replacement

The use of non-genuine manufacturer parts can end up harming performance and product life.





Despite all the caveats and variables that can affect the life of flushometer parts, one manufacturer, Sloan, the pioneer and leading industry expert in flushometers, now provides a recommended maintenance schedule for flushometers.

After installation, general recommendations are to regularly inspect the parts, look for signs of wear and tear, and replace parts as needed based on their respective maintenance indicators. This maintenance schedule contains both the part image as well as their list of maintenance indicators for easy tracking. In conjunction with following the preventative maintenance schedule, be sure to keep a detailed record of the exact installation date, model, and location along with any maintenance performed or parts replaced. Again, actual results may vary, but these guidelines are based on 110 years of manufacturing experience and can provide a solid foundation for a genuinely preventative maintenance program.



# Manual diaphragm flushometer

		Life Expectancy Industry Standard / Sloan Standard	3/4+ years	3/5+ years	15/20+ years
	Handle assembly Internal parts	Maintenance Indicator  1. Leaking around the handle 2. Drooping handle 3. Short erratic flush	<b>⊘</b>		
	Vacuum breaker Internal (baffle and sack)	Maintenance Indicator  1. Leaking around the vacuum breaker vent holes during flush cycle	<b>⊘</b>		
	Inside cover	Maintenance Indicator  1. Slow leaks into the fixture 2. Flush cycle too long or too short 3. Grooves cut into inner cover from diaphragm segments	<b>⊘</b>		
0=	<b>Diaphragm kit</b> Regal	Maintenance Indicator  1. Slow leaks into the fixture 2. Flush cycle too long or too short	<b>②</b>		
	<b>Diaphragm kit</b> Royal/Sloan	Maintenance Indicator  1. Slow leaks into the fixture. 2. Flush cycle too long or too short		<b>⊘</b>	
	Stop assembly Internal parts	Maintenance Indicator  1. Leaking around the stop 2. Failure to completely shut off water 3. Excessive wrench marks on bonnet		<b>⊘</b>	
	Brass parts Body, outside cover, stop and vacuum breaker tube	Maintenance Indicator  1. Compromised chrome finish 2. Missing or distorted threads			<b>⊘</b>
00	Flanges & connections	Maintenance Indicator  1. Compromised chrome finish 2. Missing or distorted threads 3. Excessive wrench marks on coupling 4. Leaking around connections			<b>⊘</b>



# Battery-powered diaphragm flushometers

(Same as manual diaphragm flushometer with exception of following parts)

Life Expectancy Industry Standard / Sloan Standard		3/4+ years	3/6+ years	5/7+ years	20/25+ years	
COURACTE	Batteries-alkaline	Maintenance Indicator  1. Blinking LED  2. Unit will not flush		<b>⊘</b>		
8	Sensor ring cover assembly (includes solenoid)	Maintenance Indicator  1. Unit will not flush 2. Unit will continuously leak into fixture			<b>⊘</b>	
	Electronic modules	Maintenance Indicator  1. No visible LED				<b>⊘</b>

# Hardwired diaphragm flushometers

(Same as battery-powered diaphragm flushometer with exception of following parts)

Actuator cartridge assembly	Maintenance Indicator  1. Leaking around button upon activation	<b>⊘</b>		
Solenoid	Maintenance Indicator  1. Unit will not flush 2. Unit will continuously leak into fixture		<b>⊘</b>	
Transformer	Maintenance Indicator  1. Unit will flush intermittently or not at all			<b>⊘</b>

# Hydraulic actuator flushometers

(Same as manual diaphragm flushometer with exception of hydraulic push button assembly)

Life Expectancy Industry Standard / Sloan Standard			3/4+ years	3/5+ years
	Hydraulic push button assembly	Maintenance Indicator  1. Leaking around the button upon activation	<b>⊘</b>	

## Manual piston flushometer

(Same as manual diaphragm flushometer with exception of piston kits)

<b>O</b>	Piston kit-GEM-2	Maintenance Indicator  1. Slow leaks into the fixture  2. Flush cycle too long or too short	<b>⊘</b>	
<b>O F</b> O	Piston kit-Crown	Maintenance Indicator  1. Slow leaks into the fixture 2. Flush cycle too long or too short		<b>⊘</b>

When it comes time for part replacement, using genuine parts can also keep the flushometers operating at their best for an extended period of time. While it may be tempting to save some money in the short term and go with less expensive parts, you may be sacrificing both performance and longevity. Using lower quality parts could potentially lead to further wear and tear and could actually end up costing more in repair costs down the road.

# Finding the Solution

Proper installation, preventative maintenance and replacing with high quality parts will help ensure that a building's flushometers continue to perform as intended for many years to come. These solutions can greatly extend a flushometer's lifetime, increase water savings, and ultimately reduce the costs of repairs and replacements.



# **About Sloan**

Sloan is the world's leading manufacturer of commercial plumbing systems and has been in operation since 1906. Headquartered in Franklin Park, Illinois, the company is at the forefront of the green building movement and provides sustainable restroom solutions by manufacturing water-efficient products such as flushometers, electronic faucets and soap dispensing systems, sink systems and vitreous china fixtures for commercial, industrial and institutional markets worldwide. Sloan is the world's leading manufacturer of water-efficient solutions that are built to perform, guaranteed to last, and are designed with the hopes of promoting a healthy environment through water conservation.

