# **MAG-SLOAN**

AS/NZS 1172.1:2014

Lic: WM 74580

## Flushing Systems and Flush Valves



**The most trusted name in flushometers** - Sloan has a flushometer and valve solution with the features and proven performance to suit your needs.

#### **FEATURES**

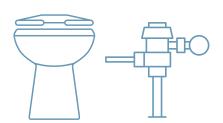
- · Dual and Single Flush Valves
- Concealed and exposed models
- Slimline Exposed, Hydraulic-actuated, low consumption Dual Flush options
- Hydraulic, manual and electronic operation
- Diaphragm and piston models
- · Touch Sense Buttons and Push Buttons
- · Urinal Sensor models
- · WaterMark and WELS approved
- Specialty needs available: Prison Programmed Water Technology (PWT)
   Bed pan washers Special finishes
- 12 month warranty



- Stronger, complete flush and faster recovery
- Immediately ready for repeat operation
- · Reliable performance each time
- Water re-use applications
- Minimal maintenance needed unequalled in low maintenance costs
- Accessibility of valve in ceiling or plumbing duct
- Works in a variety of low- and high-pressure environments
- Works on both washdown and siphon jet fixtures
- Flush valves retrofit/changeover to suit old models
- Meets ADA requirements
- Vandal resistant
- Compact, requiring little space, easy to install, in wall or in ceiling
- Widest range for all applications taking into consideration number of users and traffic patterns of restrooms, user expectations for convenience and aesthetic appeal of projects

Quality • Reliability • History • Expertise • Accept no substitute





### **Any Fixture, Any Flushometers**

Most Sloan water closets and urinals can be combined with any Sloan flushometer.



# Retrofit and Changeover

Older flush valve models and parts are no longer available\* and with the age of these older brands, even replacing washers is a short-term temporary fix!

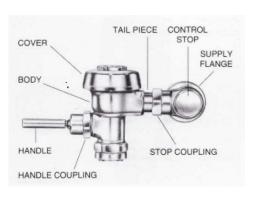
Sloan Changeover valves are the best long-term solution to retrofit to all old models - they couple easily and seamlessly to the existing older model stop valve. Choose from Concealed, Exposed, 'Slimline' Exposed, Hydraulic and low water consumption dual flush options.

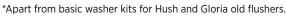
It's never been easier for retrofit projects, office and bathroom refurbishments for building owners, engineers and facility managers to create a hygienic, hands-free experience.

### Valve Body is:

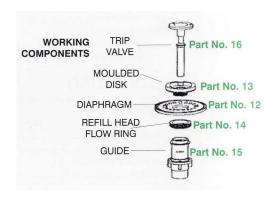
- Heavy-duty brass and corrosion resistant
- · Compact size and design
- · Same body for closet and urinal
- Works with a variety of fixtures













## Flushing Valves - Retrofit and Changeover

Gloria • Hush • Unibra
Pubco • Zurn • Dorf • Ideal
All other older valve brands







Concealed Flush Valve – Body only	<b>Product Code</b>
Sloan to Gloria, All Models & Dorf Flush Valve	42026/G
Sloan to Hush/Master Flush Valve	42026/H
Sloan to Unibra Flush Valve	42026/U
Sloan to Pubco Flush Valve	42026/P
Sloan to Zurn Aquaflush Flush Valve	42026/Z



Exposed Flush Valve - Body only	<b>Product Code</b>
Sloan to Gloria, All Models & Dorf Flush Valve	42027/G
Sloan to Hush/Master Flush Valve	42027/H
Sloan to Unibra Flush Valve	42027/U
Sloan to Pubco Flush Valve	42027/P
Sloan to Zurn Aquaflush Flush Valve	42027/Z



For Dual Flush with Green Handle	42060 GHUP
(optional Chrome Handle available)	



Sloan to <b>"Slimline" Exposed</b> Flush Valve	42029/GHUP
·	



Hydraulic Concealed Flush Valve – Body only	<b>Product Code</b>
Sloan to Gloria, All Models & Dorf Flush Valve	42028/G
Sloan to Hush/Master Flush Valve	42028/H
Sloan to Unibra Flush Valve	42028/U
Sloan to Pubco Flush Valve	42028/P
Sloan to Zurn Aquaflush Flush Valve	42028/Z



Hydraulic Concealed with Dual Flush Buttons	<b>Product Code</b>
Sloan Retrofit Dual Flush complete with two hydraulic buttons (not including Panel – available as Accessory) To suit Gloria, Hush, Unibra, Zurn.	42058/GHUZ
<ul> <li>Minimum pressure: 30kPa</li> <li>Maximum pressure: 300kPa</li> <li>Flush Volume: 6/3 Litres Standard (optional 4.5/2.2L Litre)</li> </ul>	

# **Dual Flushing Systems**









#### **Dual Flushing Systems:**

- Concealed and exposed models, suitable for mains or tank pressure installation
- Hydraulic, manual and electronic operation
- Interchangeable flushing volumes 6/3 Litre Standard (optional 4.5/2.2L Litre)
- Easy to retrofit from an old flushing system (i.e. Gloria, Hush, Unibra etc.)
- Deliver a complete flush and refill and are immediately ready to repeat the operation
- Require little space and are easy to install
- Provide reliable performance conditions
- Dual filter diaphragm available
- Flush under pressure, thus more efficiently cleanse the fixture
- Concealed systems can be installed behind the button panel or in the ceiling space
- Low maintenance costs
- Typical applications: commercial, airports, stadiums, healthcare, hospitality, educational, industrial, correctional, prison, residential, apartments
- Choice of Panels and Buttons available as optional accessory
- See Technical and Space Plumbing Requirements for Dual Flush System on pages 11 and 12 of Brochure



## Concealed, Hydraulic Dual Flush Valves

Sloan hydraulic flushometers feature a push-button actuator that uses line water pressure to actuate the valve, and it can be located remotely from the valve itself, making these ideal for difficult installations.



Product Code: 42055M - Mains Pressure

Sloan 950 Dual Flush valve complete with 25mm stopcock, flush pipe nut, vacuum breaker and 2 hydraulic flush buttons.



Product Code: 42056L - Tank Fed Pressure

Sloan 950 Dual Flush valve complete with 40mm stopcock, flush pipe nut and 2 hydraulic flush buttons.



Product Code: 42058 Retrofit/Conversion Flush valve:

Sloan 950 to suit Gloria, Hush, Unibra & Zurn. Comes with 2 hydraulic flush buttons.

# **Exposed Dual Flush Valves**



**Product Code:** 42050M - Mains Pressure

Sloan 121 Chrome Exposed Dual Flush valve complete with green handle

(chrome handle option available).

Product Code: 42051L - Tank Fed Pressure - As above



#### Product Code: 42060

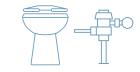
Sloan Retrofit/Changeover Chrome Exposed Dual Flush Valve - suits Gloria, Hush, Unibra,

Zurn, Dorf and Ideal.



Sloan Dual Flush "Uppercut" Handle Only - suitable for retrofitting to existing Sloan exposed chrome plated flush valves. Supplied with two signs. Also suits Zurn Flush Valves.

- Cost-conscious way to save water by upgrading to UPPERCUT® handles
- The two flush option helps reduce water volume by up to 30 percent
- Lift up for reduced litres per flush
- Push down for standard litres per flush
- Includes instructional wall plates



#### Any Fixture, Any Flushometers

Most Sloan water closets and urinals can be combined with any Sloan flushometer.

### Sloan Electronic Dual "Touch Flush" System

- In Wall and In Ceiling electronic Dual Flush System
- · Suits all toilet pans on the Australian market
- Proven Sloan benefits, including stronger flush and faster recovery
- For new installations or retrofits

- Flush Volume: 6/3 Litre Standard (optional 4.5/2.2L Litre)
- Minimal maintenance needed
- Accessibility of the valve in ceiling or plumbing duct



Sloan Electronic Dual "Touch Flush" is a Concealed electronic Dual Flush System which provides a seamless, contemporary look. Dual Flush Touch Pad has sensors built into it. A light touch on the Touch Pad will then trigger the flush valve to operate. Unit comes with 2 x Power Packs and 2 metres of lead.

<b>Product Code</b>	Product Description
42070M	Sloan Electronic Dual <b>"Touch Flush" System</b> • Mains Pressure 6/3 Litre  • Complete with 25mm stopcock, flush pipe nut and vacuum breaker  Note: Please specify the valve and wall plate (see below) separately
42071L	Sloan Electronic Dual <b>"Touch Flush" System</b> • Tank Fed Pressure 6/3 Litre  • Complete with 40mm stopcock and flush pipe nut  Note: Please specify the valve and wall plate (see below) separately

### "Touch Flush" Wall Plates - Standard and Designer Range

- Sleek attractive wall plates
- Standard Range: Satin finish Stainless Steel with Full Flush and Half Flush Touch Buttons (rotatable)
- Designer Range: Satin finish Stainless Steel and Black Glass Plate (rotatable)
- Touch Flush operation

- · Works in a variety of low and high pressure environments
- Works on both washdown and siphon jet fixtures
- · Delivers accurate flushometer water savings
- Excellent quality and competitively priced

Note: Custom Sizes also available. Plate Thickness for both Standard Range and Designer Range is: 1.2mm

Touch Flush Wall Plates - Standard Range	<b>Product Code</b>	Product Description
• 00 •	DFT 9001R	Rectangle Panel – 130mm Width x 80mm Height Satin finish Stainless Steel with Full Flush and Half Flush Touch Buttons (rotatable)
	DFT 90020V	Oval Panel – 130mm Width x 80mm Height Satin finish Stainless Steel with Full Flush and Half Flush Touch Buttons (rotatable)

Touch Flush Wall Plates - Designer Range	<b>Product Code</b>	Product Description
	DFT 9004RB	Rectangle Panel – 130mm Width x 80mm Height
		Touch Buttons Full Flush on the Left; Half Flush on the right (rotatable)
		Slim, designer, black glass plate
	DFT 9005RSS	Rectangle Panel – 130mm Width x 80mm Height
		Touch Buttons Full Flush on the Left; Half Flush on the right (rotatable)
		Slim, designer, Satin finish Stainless Steel glass plate



## Flushometers / Flush Valves - Wall Panels "Push In"

## Panels - Designer and Standard

- Sleek attractive wall panels
- · Satin finish stainless steel
- Designer Push in and Standard Push Buttons
- Easy to push-less than 5lbf/22N
- Built to last

- Work in a variety of low and high pressure environments
- Work on both washdown and siphon jet fixtures
- Deliver accurate flushometer water savings
- · Competitively priced

Please specify the valve, button and panel separately.

## **Dual Flush Panels**

### **Designer Panels**



DFDP 210/150



DFDP 300/300

### **Standard Panels**



DFSP 310/100



DFSP 300/300



DFSP 175/100



DFSP 175/175

## Single Flush Panels

### **Designer Panels**



SFDP 210/150



SFDP 300/300

### Standard Panels





SFSP 300/300



SFSP 175/100



SFSP 175/175

# Single Flushing Systems









#### **Single Flushing Systems:**

- Concealed and exposed models, suitable for mains or tank pressure installation
- Hydraulic, manual and electronic operation
- Applicable for toilets or urinals
- Interchangeable flushing volumes 6/3 Litre Standard (optional 4.5/2.2L Litre)
- Easy to retrofit from an old flushing system (i.e. Gloria, Hush, Unibra etc.)
- Deliver a complete flush and refill and are immediately ready to repeat the operation
- Require little space and are easy to install
- Provide reliable performance conditions
- Dual filter diaphragm available
- Flush under pressure, thus more efficiently cleanse the fixture
- Concealed systems can be installed behind the button panel or in the ceiling space
- Low maintenance costs
- Typical applications: commercial, airports, stadiums, healthcare, hospitality, educational, industrial, correctional, prison, residential, apartments
- Choice of Panels and Buttons available as optional accessory
- See Technical and Space Plumbing Requirements for Single Flush System on pages 11 and 12 of Brochure



## Concealed, Hydraulic Single Flush Valves

- Featuring push-button activation. Metal button panel mount actuator
- · Quiet, concealed, diaphragm type flushometer for Floor Mount or Wall Hung Water Closets



Product Code	Description	Pressure Type	
42001M	Sloan 950 Hydraulic Concealed W.C. Flush Valve with Black Button	Mains Pressure	
42106M	As above with Chrome Button	Mains Pressure	
42006L	Sloan 950 Hydraulic Concealed W.C. Flush Valve with Black Button	Tank Fed Pressure	
42108L	As above with Chrome Button	Tank Fed Pressure	
42013M	Sloan 955 Hydraulic Concealed Wall Hung Urinal Flush Valve with Black Button	Mains Pressure	
42110M	As above with Chrome Button	Mains Pressure	
42021L	Sloan 955 Hydraulic Concealed Wall Hung Urinal Flush Valve with Black Button	Tank Fed Pressure	
42114L	As above with Chrome Button	Tank Fed Pressure	
	Please specify if used for slab type urinal.		

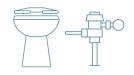


Product Code	Description	Pressure Type
42129M	Sloan 152 Concealed W.C. Flush Valve with 7 ½ push rod ass	Mains Pressure
42130L	Sloan 152 Concealed W.C. Flush Valve with 7 ½ push rod ass	Tank Fed Pressure
42132M	Sloan 152 Concealed Wall Hung Urinal Flush Valve with 7 ½ push rod ass	Mains Pressure
42131L	Sloan 152 Concealed Wall Hung Urinal Flush Valve with 7 ½ push rod ass	Tank Fed Pressure
	Please specify if used for slab type urinal.	

# **Exposed Single Flush Valves**



Product Code	Description	Pressure Type
42004M	Sloan 121 Chrome Exposed W.C. Single Flush Valve	Mains Pressure
42125L	Sloan 121 Chrome Exposed W.C. Single Flush Valve	Tank Fed Pressure
42016M	Sloan 180 Chrome Exposed Wall Hung Urinal Flush Valve	Mains Pressure
42126L	Sloan 180 Chrome Exposed Wall Hung Urinal Flush Valve	Tank Fed Pressure
Please specify if used for slab type urinal.		



### **Any Fixture, Any Flushometers**

Most Sloan water closets and urinals can be combined with any Sloan flushometer.

# Concealed, Sensor Single Flush Valve



Concealed sensor flushometers provide a clean look and help prevent tampering/vandalism.

Sloan's electronic solenoid sensor (ESS) flushometers provide the ultimate in sanitary protection and automatic operation. The flushometer operates by means of an infrared sensor that adapts to its surroundings. Once the user enters the sensor's effective range and then steps away, the flushometer solenoid initiates the flushing cycle.

- With In Wall/In Ceiling recessed infra-red sensor included
- Flush Volume: 6/3 Litre Standard (optional 4.5/2.2L Litre)



<b>Product Code</b>	Description	Pressure Type
42139M	Sloan 152ES-S Concealed Sensor Water Closet Flush Valve with Mains Pressure	
	infra-red 150x150mm panel included	
42051M	Sloan 152ES-S Concealed Sensor Water Closet Flush Valve with	Mains Pressure
	infra-red 300x300mm panel included	
42140L	Sloan 152ES-S Concealed Sensor Water Closet Flush Valve with Tank Fed Pressur	
	infra-red 150x150mm panel included	
42005L	Sloan 152ES-S Concealed Sensor Water Closet Flush Valve with	Tank Fed Pressure
	infra-red 300x300mm panel included	



42143M	Sloan 195ES-S Concealed Sensor Wall Hung Urinal Flush Valve with infra-red 150x150mm panel included	Mains Pressure
42042M	Sloan 195ES-S Concealed Sensor Wall Hung Urinal Flush Valve with infra-red 300x300mm panel included	Mains Pressure
42144L	Sloan 195ES-S Concealed Sensor Wall Hung Urinal Flush Valve with infra-red 150x150mm panel included	Tank Fed Pressure
42020L	Sloan 195ES-S Concealed Sensor Wall Hung Urinal Flush Valve with infra-red 300x300mm panel included	Tank Fed Pressure





## **Technical Information**

Technical Plumbing Requirements for Dual & Single Flush System:	Mains Pressure	Tank Fed Pressure
Minimum water supply pressure	150kPa	40kPa
Maximum water supply pressure	600kPa	300kPa
Minimum Flow Rate at the valve	1 L/second	1 L/second
Stop valve inlet	25mm BSP	40mm BSP
Flush valve outlet	40mm BSP	40mm BSP

Space Requirements for Dual & Single Flush System:	Dual Flush	Single Flush
Minimum Wall Cavity	140mm deep	90mm deep
Minimum width of assembly	270mm wide	270mm wide
Minimum height of assembly	200mm height	200mm height

### Piping Design Data for Sizing of Flush Valves Suitable for Sloan Flush Valves

The design of pipe sizes for building interiors is based on a procedure that will provide the minimum pipe sizes to adequately supply the building under peak loads.

Interior piping design differs mainly from ordinary water supply design in the method of figuring peak load demands on the system. In the usual problem the per capita demand, plus proper pumping and storage facilities, will suffice to give the estimates for determining the correct litres for correct pipe sizes.

Piping within a building requires an accurate count of all the fixtures using water and an accurate estimate of the possibilities that govern the simultaneous use of these fixtures.

There is nothing more important than the proper selection of the correct "factor of usage" figure. Understanding the "factor of usage" will result in a piping layout that will not supply enough water to the right place at the right time. Overestimating the proper "factor of usage" will result in a higher cost than necessary.

Velocity is another factor affecting the sizing of piping that must be considered. Flow rate velocities of between 5 and 8 feet per second should be used to minimise noise.

The figures in Table 1 (on the next page) are the results of long and careful study both from the practical and theoretical sides of the question. Allowances for lavatories, baths and showers plus the associated flush valves are included in these figures.

Figures given in Table 1 will provide an ample and positive flush for normal conditions shown under the proper headings. This does not take into consideration special/unusual conditions.

Demand figures under these conditions should be calculated with the best available knowledge of the probability of use at peak hours.

This Table assumes that two valves can, and will be, flushed simultaneously except in private homes. This is a common occurrence in heavy traffic installations and must be provided for.

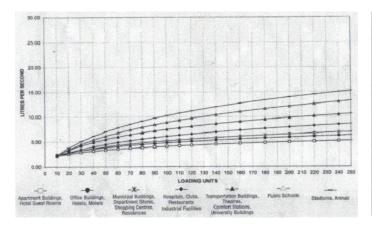
It will also be noted that, while the demand for one or two valves is high, the rate of increase for each succeeding valve becomes progressively smaller. This causes the flush valve demand curve to become nearly flat for large numbers of valves. This is since a flush valve requires an average of only six seconds per flush whereas other types of flushing devices require a supply over a period of 1 to 2 minutes. This causes them to have a much steeper curve.

Table 1 - Flow Rate Requirements in Litres Per Minute

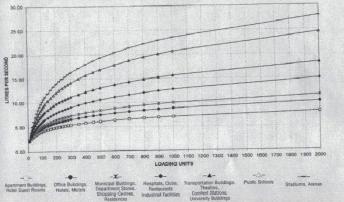
Total Number of Valves on Line	Private Homes	Apartments, Hotels	Office Buildings, Clubs, Hospitals	Very High Demand Installations (eg, Stadiums, Schools, Airports)
1	113 LPM	113 LPM	113 LPM	166
2	151 LPM	227 LPM	227 LPM	333 LPM
3	151 LPM	227 LPM	227 LPM	498 LPM
4	189 LPM	227 LPM	227 LPM	498 LPM
5	189 LPM	227 LPM	227 LPM	498 LPM
6	189 LPM	227 LPM	227 LPM	498 LPM
7		227 LPM	283 LPM	529 LPM
8		227 LPM	340 LPM	529 LPM
9		227 LPM	340 LPM	529 LPM
10		227 LPM	378 LPM	620 LPM
11		227 LPM	416 LPM	681 LPM
12		264 LPM	454 LPM	681 LPM
13		264 LPM	454 LPM	757 LPM
14		264 LPM	454 LPM	757 LPM
15		302 LPM	492 LPM	757 LPM
20		340 LPM	567 LPM	908 LPM
25		378 LPM	605 LPM	946 LPM
30		416 LPM	624 LPM	946 LPM
35		416 LPM	643 LPM	1022 LPM
40		435 LPM	662 LPM	1022 LPM
50		454 LPM	681 LPM	1022 LPM

**Table 2 -** Average Minimum Pressure needed to operate Bowls (also consult Fixture Manufacturer for specific recommendations)

Type of Bowl	Required Pressure in psi while flushing
Washdown	15
Reverse Trap	15
Reverse Trap with Jet	15
Siphon Jet	20
Blowout	25
Siphon Jet (Wall Hung)	20
Blowout (Wall Hung)	25



**Graph 1 -** Litres Per Second Demand for various Installations using Flush Valves (0-250 Loading Units)



**Graph 2 -** Litres Per Second Demand for various Installations using Flush Valves (0-2000 Loading Units)

