URINAL CONTROLS





Offering substantial water savings and a short payback period, installing urinal controls is often the first step in a water management programme. Urinal controls also ensure that washrooms remain clean and fresh, by programming the controls to meet the individual needs of each building.



Urinal controls offer an average 55%-65% water saving ...

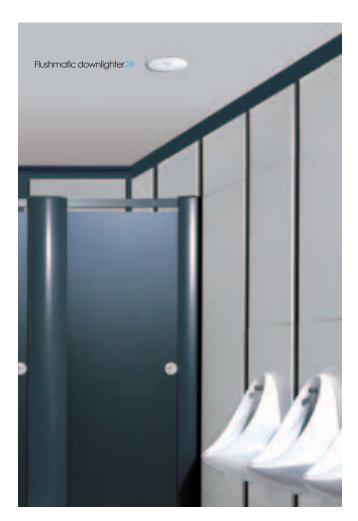


The DVS urinal control range has been designed and developed over years of experience working in washrooms. The units are easy to install and extremely versatile in their operation.

Variable settings allow adjustable time delays between flushing, providing maximum efficiency and savings. Operation is simple; A passive infrared (PIR) detector detects movement within the 'sensing area', switching the unit into a timing mode. After a pre-set time, the separately installed solenoid valve opens. Water flows into the cistern and therefore activates the flushing cycle. The fill-time for the cistern can be customised by the user, using the appropriate switches on the Flushmatic board.

The system's fast fill design helps eliminate scale problems associated with slow or drip fed systems. An automatic flush every 12 hours is also programmed into the unit, should the system not be used during that time.

Variable settings allow adjustable time delays between flushing, providing maximum efficiency and savings.



Common Features

- ▶ Up to 80% savings on water costs
- Extremely reliable
- ▶ Low maintenance
- ▶ 2 year guarantee
- ▶ Low power consumption
- ▶ Solenoid valve included
- ▶ Includes power PSU or batteries
- Adjustable fill time (15 mins max)
- Adjustable delay time
- ▶ Janitorial flush (After 12 hours of non-use)
- Service contracts available

HOW THEY WORK

DVS supply a range of urinal controls for individual or multiple station urinals. Optimum solutions are available to suit every application.

The Flushmatic urinal control is used for multiple station urinals and can be surface or ceiling mounted. This works by using a passive infrared (PIR) detector which detects movement within the 'sensing area', switching the unit into a timing mode.

After a pre-set time, the solenoid valve opens allowing water to flow into the cistern activating the flushing cycle.

The fill-time for the cistern can be customised by the user using the appropriate switches on the Flushmatic board. There is also a set of dip switches to adjust the time delay after activating the PIR.

The system's fast fill design helps eliminate scale problems associated with slow or drip fed systems.

An automatic 'janitorial' flush every 12 hours is also programmed into the unit, should the system not be used during that time.

The individual sensing urinal control systems are designed to detect individual users and only flushes when the user walks away.

DVS offer kits for single or double bowl requirements.

Installing just 3 DVS urinal controls can save enough water to fill an Olympic sized swimming pool in just 1 year!

URINAL CONTROLS



UC01-001 ≪
Flushmatic surface mount

Flushmatic - Surface Mount

The standard Flushmatic is a wall or ceiling 'surface mounted' urinal control for multiple station urinals.

Special Features

- ► Timed urinal flushing
- ▶ Valve open button
- ► Ceiling or wall mountable
- Available in mains or battery
- ▶ Battery low detection and indication (optional)



Flushmatic - Downlighter

The Flushmatic downlighter is a suspended ceiling urinal control for multiple station urinals.

Special Features

- ► Flush ceiling mounted
- ► As Surface Mount Flushmatic (except fitting)

Our range of urinal controls are suitable for individual or multiple station urinals. Optimum solutions are available to suit every application.



Pearl

The Pearl is a suspended ceiling urinal control for multiple station urinals. This unit is the size of a mini-downlighter and incorporates low battery indication.

Special Features

- Occupancy detection and indication (indicated by a flashing green light)
- ► Battery low detection and indication (indicated by a flashing red and green light)
- Valve closed before battery failure (indicated by a flashing red light until total battery loss)
- ► Timed urinal flushing
- ▶ Valve open button
- Available in mains or battery



UC07-001 « Urinal control system

Individual Control System

The individual operation urinal control system can be supplied for single or double station urinals. Standard sensor comes with 50mmø bezel.

Special Features

- ▶ Single or double station urinal flushing
- ▶ Only flushes when user walks away from urinal
- Mains power only

Major clients include: Ministry of Defence Road Chef Tesco Local Authorities BAA Airports Marks & Spencer



CASE STUDY

Churston Ferrers Grammar School

Churston Ferrers Grammar School was selected by OGC buying solutions to provide a detailed case study with a well managed school to establish some guidelines on realistic cost effective savings for water management, with DVS selected as the ideal partner to deliver technical advice, product recommendations and high quality water saving products.

By installing urinal controls, flushvalves and push taps, considerable water efficiencies were achieved.

Water savings of 46% in the year following installation

When the school site was reviewed, DVS established that the majority of urinal controls were not functioning correctly, which the school had been unable to identify. This is common in schools where urinal controls have been fitted in the last 10-15 years.

Old urinal controls were one of the biggest sources of waste – Just 1 in 7 of the old controls were operational

6 new urinal controls were fitted, plus a maintenance contract to ensure optimum long term savings

With around 450 female staff and pupils, and WCs flushing 9 to 11 litres per flush, DVS recommended fitting electronic WC Flushvalves in the 15 busiest ladies toilets. Whilst the WC Flushvalves could also provide savings in the male WCs, the use was not so high and the payback period longer, so after evaluation DVS recommended an alternative low cost solution using 1 litre displacement bags to reduce water consumption without compromising the efficiency of flushing.

WC Flushvalves fitted in the busiest female WCs

Displacement bags fitted in cisterns of low traffic male WCs

Phase 2 of the project revealed the poor state of the existing push taps in all but one new toilet block. Replacement and upgrading took place as and when refurbishments were undertaken.

Old push taps resulted in excessive water flow and run time

New water efficient self closing non-concussive taps were installed

The school also has evening classes, a swimming pool and sports hall used by members of the public, however by tackling the main water saving areas the level of savings achieved has been maintained over the following years bringing the school up to best practice standards, whilst offering consistently high levels of hygiene.



DVS has developed two powerful Urinal Sleeve solutions to help reduce smells and blockages and also save water.

URINAL SLEEVES

Unpleasant smells and blockages

Gents toilets frequently have problems with unpleasant smells of urine and blocked flushpipes putting bowls out of use.

Conventional urinal blocks inside the bowl can add to the problem and increase the potential for blockages. Unfortunately these blocks only attempt to mask the unpleasant smells and provide no real long-term solution.

Cure the problem at source!

The DVS Urinal Sleeve helps to prevent the problems which contribute to urinal odours. After the initial Urinal Sleeve outlet is installed the replacement sleeves simply drop into place.

The Urinal Sleeve lower body lines the waste outlet and trap just above the water level. This feature not only prevents leaking and staining from waste connections, but is also removed and discarded periodically as part of the refill, thus ensuring the lining is kept clean.

The most important feature of the Urinal Sleeve is housed within its cone shaped head. This contains a cleaner deodoriser block which both reduces bio-film build up, reduces the odour and scale in the outlet and helps prevent blockages.

The teardrops on the side of the cone allow urine to pass onto the active ingredient, thus activating and transferring the cleaner deodoriser via the sleeve to the trap where they act on the urine preventing the foul odours. The block also contains a fragrance to provide a pleasant environment.

Timed Urinal Control System

Although the biological version of the Urinal Sleeve is an effective waterless solution, a more effective result for high traffic areas can be achieved by periodically flushing the urinals with clean water. This helps keep the urinal clean and also re-activates the block inside the head of the urinal sleeve.

DVS' solution for achieving periodical flushing is the 'Timed Urinal Control System'. This is a programmable control system that can be customised to achieve the number of flushes required.



UC00-017 A Urinal Sleeve Bio - Refill

UC00-013 A Urinal Sleeve Chemi - Refill



UC00-007 A Urinal Sleeve Bio - Installation Kit

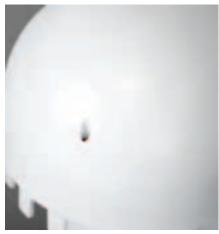
UC00-009 A Urinal Sleeve Chemi - Installation Kit



UC01-010 A Timed Urinal Control System

The specially formulated dualpurpose block both controls odours and reduces bio-film build up.







Two Solutions

The Urinal Sleeve offers two types of solution, BioUrinal and ChemiUrinal, each doing similar jobs but aimed at different environments.

BioUrinal

The BioUrinal can be very effective in low to medium use areas. Flushing should be limited to once every two hours to get the best performance from biological sleeves.

The enzymes feed on the uric salts and require two hours to multiply to be fully effective. In busy toilets, such as airports, motorways services and busy factory toilets it may be found that to keep the bowl fresh a more frequent flush is required.

Normally scale and bio-films with bad odours build up on the lining of the inlet trap. The biological treatment reduces this build-up.

The biological cleaner deodoriser is fitted into the cone. The teardrops on the side of the cone allow urine to pass onto the block, thus activating the enzymes and transferring the enzymes via the sleeve to the trap where they feed and multiply.

Only biological cleaners should be used with BioUrinal sleeves as conventional cleaners kill the enzymes.

The BioUrinal sleeve is recommended when there is a requirement to save the maximum amount of water, and limited washing of the bowl is acceptable, where the use is low to medium. The BioUrinal sleeve should be replaced every 3 months.

ChemiUrinal

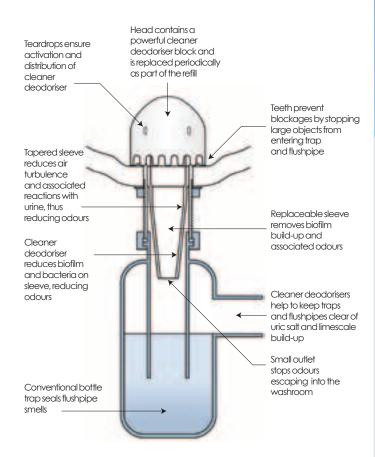
The ChemiUrinal sleeve achieves a very similar effect to the BioUrinal sleeve. The cleaner deodoriser is a well proven chemical formula designed to reduce uric salt and scale build up in the trap and flush pipes and also kills malodours.

There are a number of advantages of the chemical cleaner deodoriser solution. The product is effective no matter how often the urinal bowl is flushed and is therefore beneficial in busy toilet areas including airports and motorway services as well as low to medium use toilets.

The product can be utilised with existing flushing systems to help reduce smells and keep pipes clear.

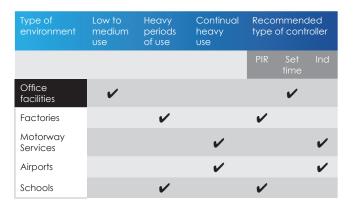
The ChemiUrinal sleeve can also be used in conjunction with conventional cleaners. Therefore if there is a risk of cleaners not always using biological cleaners the ChemiUrinal sleeve will resolve this issue. Replacement times will depend on frequency of flushing and levels of use.

Our Urinal Sleeves use a well proven chemical formula designed to reduce uric salt and scale build up in the trap and flush pipes and also kill malodours.



CHOOSING BIOURINAL OR CHEMIURINAL SLEEVES

The following guide gives an indication of Urinal Sleeve and water flush control selection. DVS are pleased to advise and assist with trials.



BioUrinal
ChemiUrinal

Use the key to identify the ideal urinal sleeve for your application.

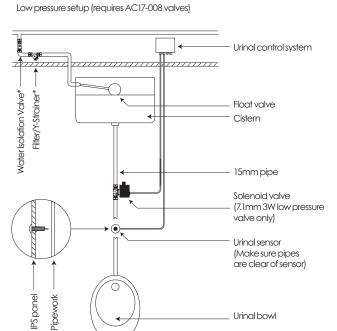
Typical Installations

STANDARD SETUP FOR URINAL FLUSHING - USING CISTERN

MULTIPLE BOWL SETUP - PEARL OR FLUSHMATIC

Pearl or Flushmatic *Air break Cistern Auto-syphon 22mm pipe 15mm pipe Urinal bowl

SINGLE BOWL SETUP - URINAL CONTROL SYSTEM

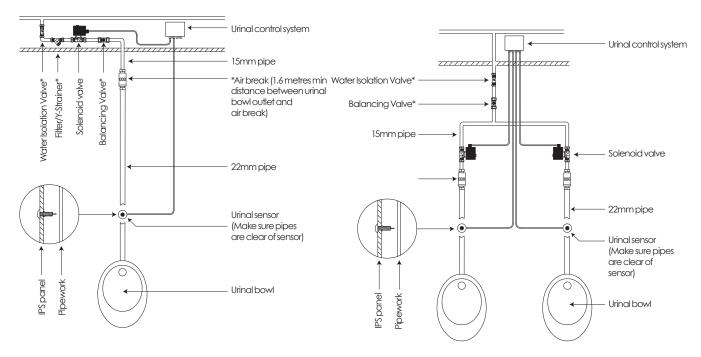


DIRECT URINAL FLUSHING SETUP- USING MAINS WATER

SINGLE BOWL SETUP - URINAL CONTROL SYSTEM Not all installations suit direct flushing. Please contact our team for guidance.

MULTIPLE BOWL SETUP - URINAL CONTROL SYSTEM (2 STATION KIT)

Not all installations suit direct flushing. Please contact our team for guidance.



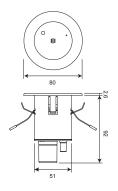
*Not supplied. Can be ordered separately from DVS.

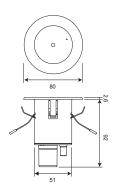
Typical installation diagrams are intended as a guide only. Appropriate regulations should be adhered to.

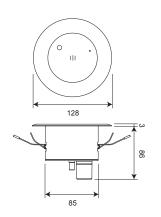
Please note: Illustrations not to scale

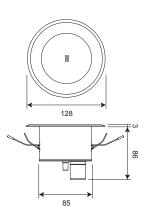
Dimensions

CONTROLLERS AND SENSORS







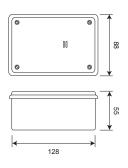


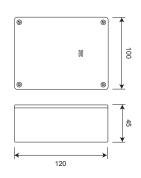
UC01-019 ↑
Pearl downlighter

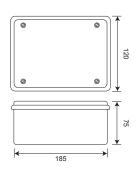
UC01-027 ↑ Pearl Solo downlighter

UC01-022 ↑ Pearl Retro-Fit downlighter

UC01-019 ↑
Flushmatic downlighter



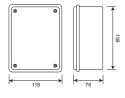


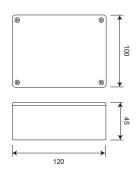


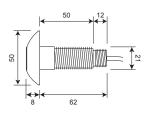
UC01-001 / UC01-007 ☆ Flushmatic - Grey (Mains / Battery)

UC01-005 / UC01-009 $\stackrel{\wedge}{\wedge}$ Flushmatic - White (Mains / Battery)

UC07-003 ↑ 2 Channel Tap Control Box







UC07-001 ↑ Urinal control system

UC01-010 ↑ Timed Urinal Control System

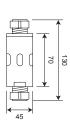
UC07-008 ↑
Infrared urinal sensor with 50mmø Bezel

Cable length: 3m

Fixing: 1/2" BSP Fixing for extension: 3/8" BSP (22mmø clearance drill hole)

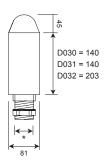
Dimensions

ACCESSORIES

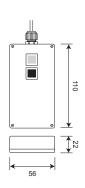


UC00-001 $\stackrel{\wedge}{\wedge}$ Air break (back flow preventer)

Inlet: 15mm Inlet Outlet: 22mm Inlet

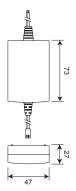


UC00-003 = 1" BSP UC00-004 = 1 1/4" BSP UC00-002 = 1 1/2" BSP Auto-syphon



AC17-027 ∧ Valve latcher

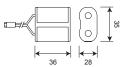
Cable length: Approx 250mm

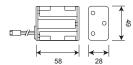


UC00-016 ↑ Flushmatic/Pearl PSU - 6v

Mains cable length: Approx 2m

Low voltage cable length: Approx 1m







UC00-006 ∧ Flushmatic battery pack - 6v UC00-005 ↑ Flushmatic battery pack for low indicator model-9v

AT00-026 🔨 Pearl battery pack-6v

Please note: Illustrations not to scale



URINAL CONTROLS

Urinal Control Kits

Profile (Not to scale)	Code	Description
	UC01-001	Flushmatic surface mount kit in Grey - Battery
O	UC01-005	Flushmatic surface mount kit in White - Battery
	UC01-004	Flushmatic surface mount kit in S/Steel - Battery
	UC01-014	Flushmatic surface mount kit in Grey - Mains
	UC01-017	Flushmatic surface mount kit in White - Mains
	UC01-016	Flushmatic surface mount kit in S/Steel - Mains
	UC00-024	Replacement fuse for Flushmatic - TR5 (T)1.6A
	UC01-007	Flushmatic surface mount kit with battery low indicator in Grey - Battery
° "	UC01-009	Flushmatic surface mount kit with battery low indicator in White - Battery
	UC01-008	Flushmatic surface mount kit with battery low indicator in S/Steel - Battery
	UC00-024	Replacement fuse for Flushmatic - TR5 (T) 1.6A
	UC01-018	Flushmatic downlighter kit for suspended ceilings in White - Battery
	UC01-028	Flushmatic downlighter kit with battery low indicator in White - Battery
	UC01-024	Flushmatic downlighter kit for suspended ceilings in White - Mains
	UC00-024	Replacement fuse for Flushmatic - TR5 (T)1.6A
	UC01-019	Pearl downlighter kit for suspended ceilings in White - Battery
	UC01-025	Pearl downlighter kit for suspended ceilings in White - Mains
	UC01-027	Pearl Solo downlighter kit for suspended ceilings in White - Mains
	UC00-023	Replacement fuse for Pearl - TR5 (T)1.25A
	UC01-022	Pearl Retro-fit downlighter kit for suspended ceilings in White - Battery
(° 1)	UC01-026	Pearl Retro-fit downlighter kit for suspended ceilings in White - Mains
	UC00-023	Replacement fuse for Pearl - TR5 (T)1.25A
		⚠ Notes: The Retro-fit canister is the same size as the Flushmatic downlighter so will fit
		into any existing Flushmatic holes in the event of an upgrade.
	UC07-010	Urinal control system - 1 station kit - Infrared sensor with 50mmø bezel
(S	UC07-011	Urinal control system - 2 station kit - Infrared sensors with 50mmø bezels
	UC07-001	Urinal control system for 1 or 2 urinals (control box only)
	AC17-009	Plastic valve (12v DC) with 3m cable and spade connectors
	PP00-100	Urinal control system fuse - Primary - 20mm Glass 240V (T)100mA
	PP00-101	Urinal control system fuse - Secondary - TR5 (F)500mA
		\triangle Notes: Kits include control box, power supply, sensor, 50mmø bezel and solenoid valve
<u> </u>		with 3m cable and spade connectors. Standard infrared sensor bezel is brushed.
		Requires minimum pressure of 0.5 BAR. Must be used with 3W 12V DC NC solenoids.
	UC00-027	Infrared urinal sensor (price excludes bezel) - Cable length 3m
	UC00-028	50mmø chrome bezel for urinal control system sensor
	UC00-029	50mmø stainless steel bezel for urinal control system sensor (standard)
	AC02-056	Sensor thread extension for 100mm wall thickness
	AC02-057	Sensor thread extension for 150mm wall thickness
	AC02-058	Sensor thread extension for 250mm wall thickness

URINAL CONTROLS

Battery Operated Individual Controller (uses 6v latching valves)

Profile (Not to scale)	Code	Description
0 0	UC07-003	2 Channel Urinal Control Box
	AC17-006	6v DC ASCO Solenoid valve 12.7mm orifice - 0.5-10 BAR - 15mm
	AC17-005	6v DC ASCO Solenoid valve 6.7mm orifice - 0-0.7 BAR - 15mm
		⚠ Notes: Sensors as shown on previous page

Urinal Sleeves and Cleaners

Profile (Not to scale)	Code	Description
	UC00-007	BioUrinal Sleeve installation kit - Biological - 1 1/4" BSP
	UC00-008	BioUrinal Sleeve installation kit - Biological - 1 1/2" BSP
	UC00-017	BioUrinal Sleeve refill - Biological
	UC00-009	ChemiUrinal Sleeve installation kit - Chemical - 1 1/4" BSP
	UC00-010	ChemiUrinal Sleeve installation kit - Chemical - 1 1/2" BSP
	UC00-013	ChemiUrinal Sleeve refill - Chemical
	UC01-010	Timed urinal control system (Includes solenoid valve) - Battery
	UC01-011	Timed urinal control system (Includes solenoid valve) - Mains
<u> </u>		$ \textbf{\triangle \textbf{Notes}$: Only biological cleaners should be used with BioUrinal sleeves as conventional cleaners kill the enzymes. } $
ATT THE		

Accessories

Profile (Not to scale) Code	Description
UC00-006 AT00-026 UC00-016	Battery pack for Flushmatic urinal controls (with tails) - 6v Battery pack for Pearl and overseas Flushmatic urinal controls (without tails) - 6v Power supply for Pearl and Flushmatic urinal controls - 6v
UC00-021	Flushmatic printed circuit board
AC17-027	Valve latcher A Notes: Enables manual operation of solenoid valve without requiring urinal control. Useful for testing or commissioning purposes.
UC00-001	Air break (back flow preventer) 15mm/22mm - Prevents backflow to water supply
UC00-003 UC00-004 UC00-002	Auto-Syphon for urinal cisterns - 5 1/2" x 1" BSP Auto-Syphon for urinal cisterns - 5 1/2" x 1 1/4" BSP Auto-Syphon for urinal cisterns - 8" x 1 1/2" BSP

