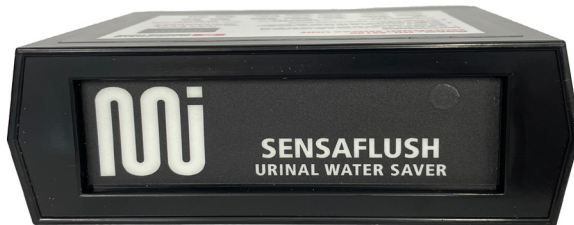


WGAUS

WATERGUARD-SENSAFLUSH



CONTENTS OF STANDARD WATER GUARD INSTALLATION (WGAUS)

- 1.1 1 x Waterguard Sensaflush Control Unit with Adjustable Mounting Bracket
- 1.2 40VA 24VAC Power Supply
- 1.3 1 x Set of Installation Instructions
- 1.4 2.0m Dual Flux Cable (Fig 8 cable)
- 1.5 1 x Warranty Form

CONTENTS OF WATERGUARD SENSAFLUSH INSTALLATION KIT (PRE-ASSEMBLED)

- 2.1 WG-FVA15AUB – Metal Body Solenoid Assembly
- 2.2 WG-FVA15AUN – Composite Body Solenoid Assembly

GENERAL DESCRIPTION

SensaFlush consists of two main items. A Sensor control unit and an installation kit. The combination allows controlled flushing of Urinals to prevent unnecessary water wastage

OPERATING PRINCIPLE

On detection of a person stepping up to the urinal, the SensaFlush will initiate a cycle of flushing. If the SensaFlush is installed as preset, flushing will occur approximately 1.5 minutes after detection and run for 7 seconds. Once the cycle has finished, a new cycle will only commence when another detection is made. SensaFlush is programmable to suit individual customers' needs and the operations (selectable) are shown in diagram 10.

PLUMBING INSTALLATION

This SensaFlush is preset to be installed in conjunction with an installation kit. All plumbing should be completed by a qualified tradesman. It is your responsibility to ensure the switches set to factory or your desired settings.

Under no circumstances should a urinal be installed without complying with current building regulations and/or territorial approvals (AS1172). If in doubt, contact your local building authority.

A 5-Star WELS rating is achievable for a single wall hung urinal or 600mm stall of a slab urinal with the recommended installation kit. Higher flush volumes are possible by fitting other flow regulators (available upon request).

We recommend wall hung urinals are flushed for 7 seconds and slab type urinals for 15 seconds.

15mm standard solenoid valves are supplied and operate in the 50-500kPa range, but we recommend setting the inlet pressure between 350 and 500kPa for best performance. Please use a suitable Pressure Reducing Valve if required. Where very low pressure exists, ensure pipe sizing is sufficient to compensate. Water pressure should not be less than 100kPa.

ASSEMBLY INSTALLATION

The installation kit is all pre-assembled and water tested from the factory, it will come in 2 pieces for shipping purposes, just re-connect the barrel union to complete the assembly. Make sure all joints are watertight. Flush out supply lines before final testing of the kit. Remember 1 x Installation kit is required for each water entry on urinals, with a maximum of 3 kits per sensor unit. Please note as per AS3500, slab type urinals to have 1 water entry for every 1.8m of urinal length minimum.

Diagram 1



WG-FVA15AUB



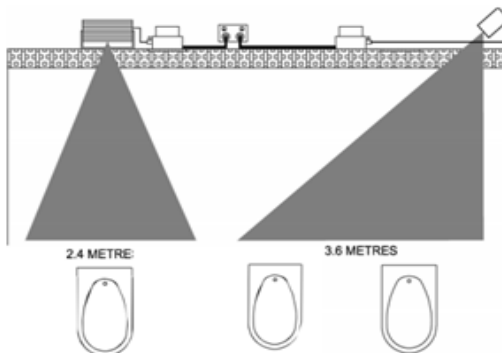
WG-FVA15AUN

ELECTRICAL INSTALLTION

Electrical work should be carried out by a registered electrician.

The control unit should be positioned, if possible to detect only people using the urinal. Detection field patterns are as per Diagram 2, but smaller “lobes” of detection can occur outside this main lobe.

Diagram 2



Avoid pointing the control unit towards hallways or other areas where traffic patterns may encourage false triggering. Remember, SensaFlush will detect through ceilings and walls up to 4 meters.

Where there are multiple urinals and SensaFlush, avoid pointing the control unit towards the urinals as water movement can also cause a false triggering.

The control unit can be mounted above a ceiling for out of sight installation, provided the thickness of the ceiling does not exceed 15mm and is a non-conductive material such as plaster, plastic or glass. Materials such as sheet metal, foil or foil backed boards and wire reinforced glass should be avoided. See Diagram 3 and 4 for clearances.

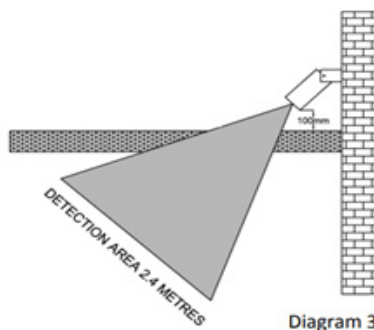


Diagram 3

When the controller is plugged in, the red LED on the front of the controller should come on and flickers when movement is detected. Adjust the position of the controller to achieve suitable detection.

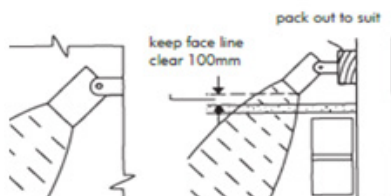


Diagram 4

WIRING INSTRUCTIONS

One Solenoid Wiring Instructions

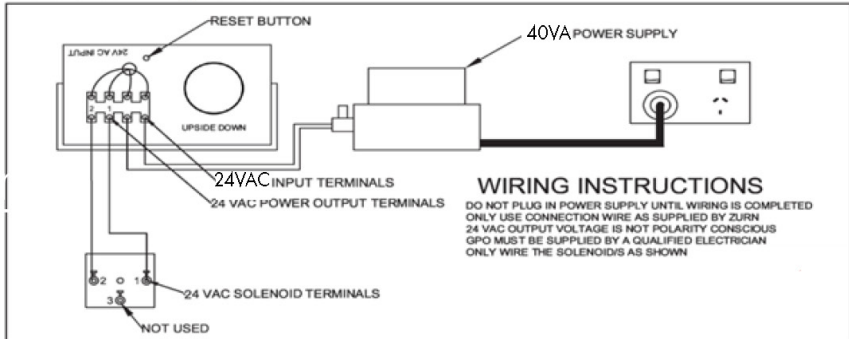


Diagram 5

Two Solenoid Wiring Instructions

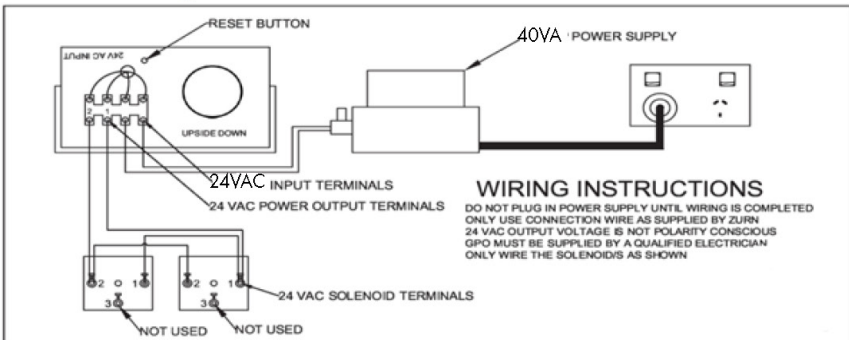


Diagram 6

Three Solenoid Wiring Instructions

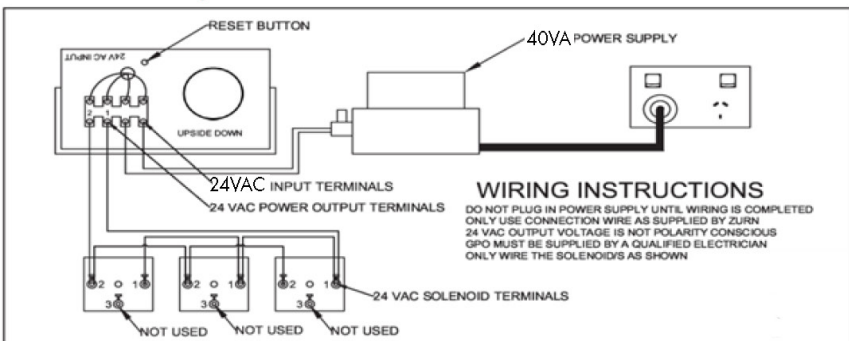
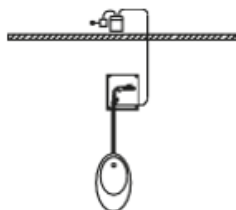


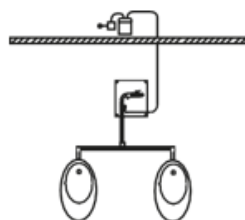
Diagram 7

SENSAFLUSH SENSOR UNIT - VITEROUS CHINA URINALS



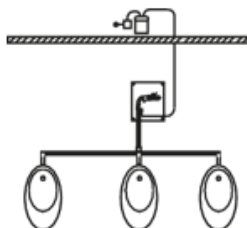
Option 1: Single Wall Hung Urinal

Using 1 x WGAUS Sensor
and 1 x WGAUS-KIT



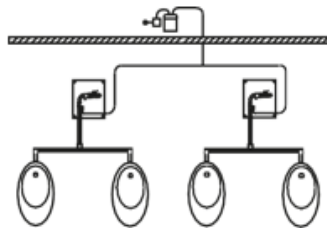
Option 2: 2 x Single Wall Hung Urinals

Using 1 x WGAUS Sensor
and 1 x WGAUS-KIT



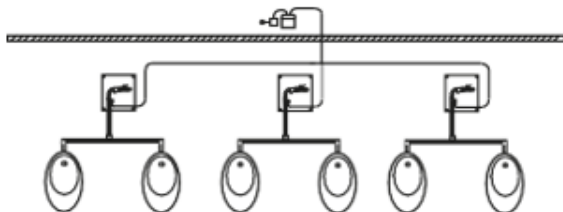
Option 3: 3 x Single Wall Hung Urinals

Using 1 x WGAUS Sensor
And 1 x WGAUS-KIT



Option 4: 4 x Single Wall Hung Urinals

Using 1 x WGAUS Sensor
And 2 x WGAUS-KIT

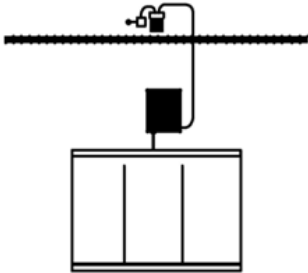


Option 5: 6 x Single Wall Hung Urinals

Using 1 x WGAUS Sensor
and 3 x WGAUS-KIT

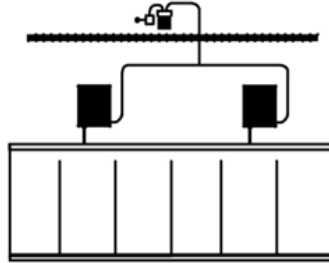
Diagram 8

SENSAFLUSH SENSOR UNIT - STAINLESS STEEL URINAL



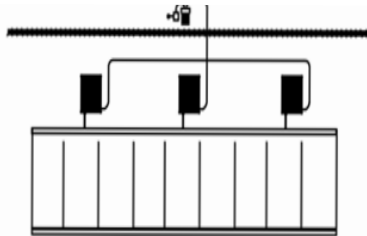
Option 1 : Slab Type Urinal with Inlet Sparges

Using 1 x WGAUS Sensor and
1 x WGAUS-KIT



Option 2 : Slab Type Urinal with 2 Inlet Sparges

Using 1 x WGAUS Sensor and
2 x WGAUS-KIT



Option 3 : Slab Type Urinal with 3 Inlet Sparges

Using 1 x WGAUS Sensor and
3 x WGAUS-KIT

Diagram 9

SETTING OPTIONS

Located on the back of the sensor control unit is a small circular plate.

Behind this is a series of 8 switches which give you the option of changing the flush cycle to suit your clients’ requirements. There are 3 sections that can be programmed;

- A. After Hours Flushing: Gives the option of regular after hours flushing (courtesy flush) to reduce the likelihood of a trap drying up.
- B. Delay After Detection: Sets the delay time from time of detection to time of flush, which is typically set to 1.5 minutes.
- C. Flush Time: 7 seconds for Wall Hung Urinals, 15 seconds for Slab Type Urinals

SWITCH SETTINGS

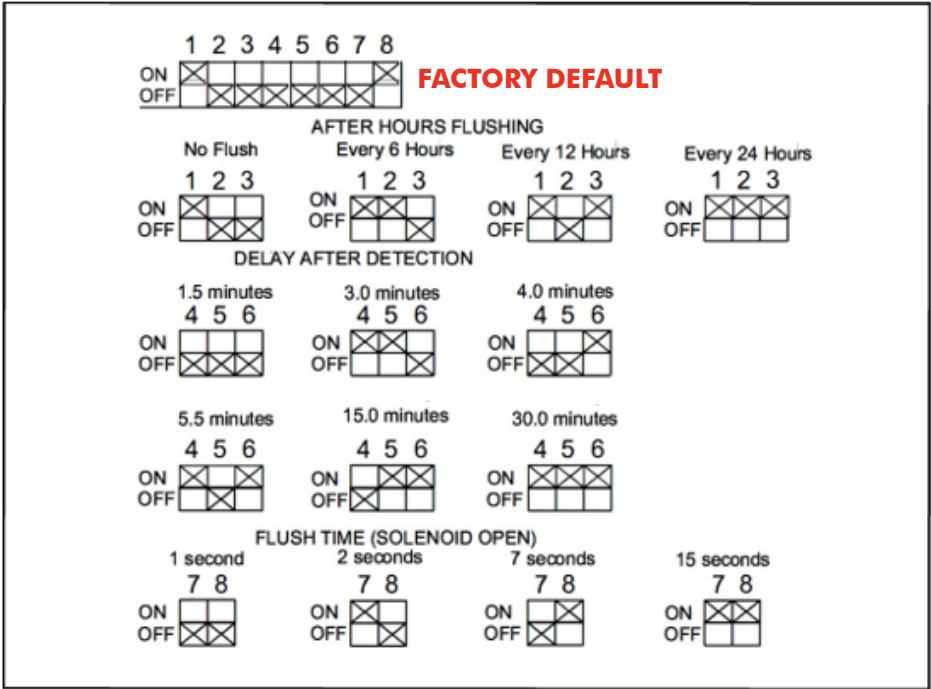


Diagram 10

COMISSIONING

Once the electrician has wired up the unit, it is necessary to ensure the flushing function is correct.

Check that the switch setting has been altered to suit the clients' needs and/or urinal style. Refer Diagram 10.

Press the reset button on the back of the SensaFlush. The solenoid(s) valves should open for 2 seconds then close. Pass your hand in front of the sensor, the LED on the front should flicker when detecting movement. Wait for the chosen delay period – the solenoid(s) should open for the chosen flush time.

SPARE PARTS	
FLUSH VALVE	WG-FVA15AUB - 15mm metal bodied flush valve assembly
FLUSH VALVE	WG-FVA15AUN - 15mm composite bodied flush valve assembly
TRANSFORMER	WA2-TR1 - 40VA transformer

MAINTENANCE

It is recommended the valve is annually checked for leaks and correct performance.

Problem	Cause	Remedy
Poor/inadequate flush	Incorrect pipe sizing or inadequate pressure	Increase pipe supply, boost pressure
Short flush	Excessive pressure Incorrectly set flush time	Fit pressure reducing valve Adjust DIP switches
Leaking from vacuum breaker slots	Back pressure from Urinal / Spreader	Check urinal rim or spreader for blockage
Valve will not flush	Water supply cut off Electrical supply switched off	Turn water on Restore electrical supply
Valve won't shut off	Electrical connection on solenoid valve installed wrong	Ensure wiring as per installation instructions.
	Debris under diaphragm	Clean out / replace diaphragm
	Coil malfunction	Replace coil



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