



# Acme Sanitary Ware Co. Ltd.

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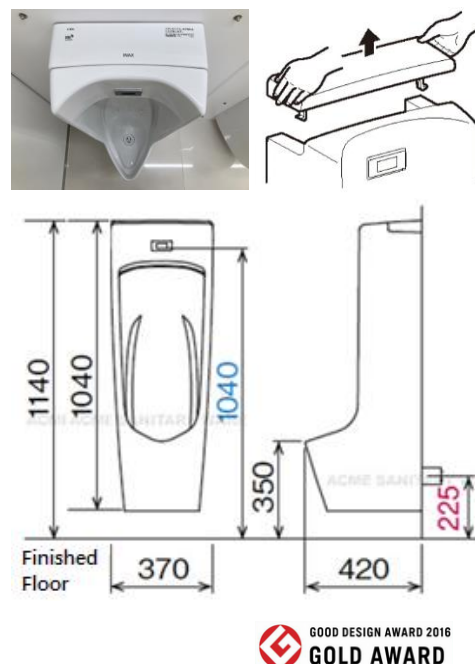


PROJECT		REF		REV	ITEM CODE	
LOCATION		DATE			PAGE	

## SANITARY WARE SPECIFICATION SHEET

Item Descriptions	LIXIL / INAX (Japan) <b>Wall hung</b> urinal with built-in sensor with <b>hydroelectric power</b> in DC supply tested on BS 5520:1977, BS EN 13407:2015, BS 3402:1969, HTM 64:2006, BS 3402, BS EN 274-1:2002 & MOD ISO 22196; test report J27017B, J27017C, J27017D & J27017E; Flush Volume 2 L/M at super AI water saving mode; <b>Aqua Ceramic</b> Technology against stain lasting a century ; complied with <b>JIS &amp; JWWA</b> ; Water flush volume <b>1.4 &amp; 1.1 litres/cycle</b> in <b>WELS Grade 1</b> ; Registration No. 1U 18-0034 & 1U 18-0050	Illustration/ Drawing
Dimensions	W420 x L370 x H1140 mm	
Model	YU-A51MP/BW1	
Finish	Vitreous China / Aqua Ceramic	
Manufacturer	LIXIL / INAX	
Country of Origin	Japan	
Source	Acme Sanitary Ware Co. Ltd Mr. Eric Wong/ Mr. Don Yuen (852) 2388-7171 / (852) 2710-8012 acme@acmesanitary.com.hk www.acmesanitary.com.hk	
Contact Tel/Fax		
E-mail		
Website		

Product No.	YU-A51MP	YU-A51ML	YU-A31MP	YU-A31ML
Urinal	Wall-hung type		Floor-mounted Type	
Product dimensions	370 (W) x 420 (L) x 1040 (H)		370 (W) x 420 (L) x 1140 (H)	
Product weight	Approx. 62 kg		Approx. 68 kg	
Power supply	Self-powered (*Note 1) With dedicated lithium battery		Self-powered (*Note 1) With dedicated lithium battery	
Power consumption	4W or less at normal operation, 8W or less during valve operation			
Sensing distance	Adjustable in 4 steps from approx. 200 mm to 400 mm (approx. 400 mm at shipment)			
Sensing width	Approx. φ 200 mm			
Ambient operating temperature	0 to 40°C *Not for cold climates.			
Water supply pressure	Minimum required pressure: 0.07 MPa (fluid pressure), Maximum water pressure: 0.75 MPa (hydrostatic pressure)			
Water supply connection screw	PJ1/2 (Connect with Rc1/2)			
Drainage connection diameter	VU50, VP50	LP50	VU50, VP50	LP50
Pre-cleaning	Selectable from 1. Yes: 0.5L, 2. No (factory default: set to 1)			
Main cleaning	1. Super AI water-saving mode : 0.8-2L (at shipment) 2. AI water-saving mode : 2-4L 3. Fixed mode : 4L fixed			
Equipment protection cleaning	1. Super AI water-saving mode : Automatically flushes 2L if no user is present for 2 consecutive hours (set to 1 at shipment) 2. AI water-saving mode, fixed mode : Automatically flushes 4L when there is no user for 8 consecutive hours. * In addition, "4L flush every 2 hours", "4L flush every 24 hours", and "Not" can also be set regardless of the water-saving function. However, when "4L flush every 24 hours" or "no flush" is selected, urinary calculus builds up in the drain pipe, causing it to clog easily, and urine odor may be noticed. In addition, in the case of the aquenergy system, the dedicated lithium battery will be depleted faster because the amount of electricity generated will be reduced.			
Other water-saving features	• If a user is detected during the main cleaning, the flush is stopped. • No main cleaning if not sensed within 4 seconds of sensing.			
Cleaning function	Cleaning and washing can be performed with the optional cleaning magnet switch (Part No. A-3996) * OK-3RC (remote control for cleaning) is not compatible.			



Link:

<https://www.youtube.com/watch?v=Yp00xtcvYY>  
<https://www.youtube.com/watch?v=NIK5aYDBR>

Model: A-8175 is 1/2" sensor flush valve for this urinal.

\* All information of the above is for the reference only. No prior notice is made if any changes.

註冊號碼 (Registration No.):

1U 19-0034



自願參與用水效益標籤計劃 - 小便器用具  
Voluntary Water Efficiency Labelling Scheme - Urinal Equipment



ACME SANITARY WARE



茲證明

This is to certify that

將下列小便器用具在本計劃內註冊：  
has registered the following urinal equipment under this scheme:

牌 子 / Brand	:	LIXIL INAX
型 號 / Model	:	YU-A51MP/BW1
種 類 / Category	:	1
原產地 / Country or Region Origin	:	Japan

在用水效益標籤上展示的標誌

*Symbolic Presentation on the Water Efficiency Label*



滴水點

*Water droplet(s)*

用水效益級別

*Water Efficiency Grade*

: 1

沖水量

*Water Flush Volume*

: 1.4

公升/循環

*litres/cycle*

簽發日期:

*Date of Issue:*

5 July 2019



水務署

Water Supplies Department



水務署署長(張業駒代行)

for Director of Water Supplies

· 上述小便器用具具有智能功能，並且能達至額外節省用水。

The above urinal equipment is operated with a smart demand operation to achieve additional water saving.

註冊號碼 (Registration No.): 1U 18-0050




自願參與用水效益標籤計劃-小便器用具  
Voluntary Water Efficiency Labelling Scheme -Urinal Equipment



This is to certify that

將下列小便器用具在本計劃內註冊：  
has registered the following urinal equipment under this scheme :

牌 子 / Brand	:	LIXIL INAX
型 號 / Model	:	A-8175
種 類 / Category	:	1
原產地 / Country or Region Origin	:	Japan

在用水效益標籤上展示的標誌 <i>Symbolic Presentation on the Water Efficiency Label</i>	:		滴水點 <i>Water droplet(s)</i>
用水效益級別 <i>Water Efficiency Grade</i>	:	1	
沖水量 <i>Water Flush Volume</i>	:	1.1	公升/循環 <i>litres/cycle</i>

簽發日期: 29 May 2018  
Date of Issue:



水務署  
Water Supplies Department



水務署署長(周世威代行)  
for Director of Water Supplies

· 上述小便器用具具有智能功能，並且能達至額外節省用水。  
The above urinal equipment is operated with a smart demand operation to achieve additional water saving.





水務署  
Water Supplies Department

總部 Headquarters

香港灣仔告士打道七號入境事務大樓 48 樓

7 Gloucester Road, Wan Chai, Hong Kong

本署檔號  
Our ref.  
來函檔號  
Your ref.



2022 T/J(1356/2022)

電話 :  
Tel.  
傳真 : 2824 0578  
Fax.

1 March 2023

**Approval of "LIXIL INAX" Sensor Flush Valve  
(General Acceptance No. C20230115F)**

Your letters ref. WRC/2816, C-WSD/0989 and C-WSD/0998 dated 7 December 2022, 29 December 2022 and 10 February 2023 respectively refer.

Having considered the test report ref. J27753r2 issued on 31 January 2023 by Nutek Systems (HK) Ltd., this Authority accepts that the fitting described below complies with, and its use when correctly installed does not contravene, the Waterworks Ordinance and Regulations.

**Name of Manufacturer:** LIXIL Corporation  
**Country of Origin:** Japan  
**Brand:** LIXIL INAX  
**Details of Fitting:** 1/2" Sensor flush valve for urinal  
**Model:** A-8175  
**Body Markings:** Nil  
**Expiry Date:** 24 April 2027





**Proviso:** As the fitting has not been tested for use in contact with water intended for human consumption, the fitting can only be used in flushing water plumbing systems.

This Authority hereby permits the use of the above fitting in flushing water plumbing systems subject to full adherence to Waterworks installation requirements. In particular, you are required to draw your customers' attention to the following requirement-

"Installation of filter before flushing valve is required. Without the filter, the flushing valve is liable to leak. The installed filter need frequent inspection and cleaning to maintain flushing supply. Normally only public toilets with good management system for maintenance would be considered."

"A stop cock or gate valve must be installed at the upstream of the fitting for manual isolation of water supply."

"The design flushing volume of the flushing valve should be compatible with the toilet bowl to ensure that effective clearance can be achieved by a single flush of water."

"Flushing valve should be used within the range of working pressures specified by the manufacturer." AND

"Installation of electronic opening and closing sanitary tapware should also comply with the requirements of Electrical & Mechanical Services Department."

A condition of this acceptance is that the fitting to be installed shall be replicas of the sample as certified by the testing agent mentioned above and without modifications. This acceptance may be withdrawn at any time if the standard of the fitting installed fails to meet that of the approved sample or if the fitting is found to be unsuitable for use in flushing water plumbing systems.

For the use of the fitting in any project, the General Acceptance Number of this letter must be quoted as a means of identification of acceptance of the fitting by this Authority.

Should you have any enquiries, please contact our Engineer Ms Winnie LO at tel. no. 3583 4086.

Yours faithfully,



(YAU Hau Yin)

for Director of Water Supplies

Encl.

c.c.      WSD 3321/1/82    ] - without catalogue  
             ME/MC            ] - with soft copy only

# INAX

## Sensor-integrated Stall Urinals

U-A51MP (wall-hung type, for both VU and VP pipes, aquenergy type)

U-A51ML (wall-hung type, for lead pipe, aquenergy type)

U-A31MP (floor-mounted type, for both VU and VP pipes, aquenergy type)

U-A31ML (floor-mounted type, for lead pipe, aquenergy type)

## Instruction Manual

Thank you very much for purchasing our product.

Please read this manual carefully before use and use the product properly.

After reading, please keep it in a safe place where it can be easily accessed.

- Make sure to follow the precautions described in this manual.
- Please note that we are not responsible for any accidents that may occur due to improper use.
- If you move, please hand this manual and warranty card to the next tenant.

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## Safety Precautions (Please be sure to observe.)

- Before using the product, please read this "Safety Precautions" carefully to ensure proper use.
- The precautions shown here may lead to serious consequences under certain circumstances. All of them are important safety information and must be observed.

### Explanation of terms and symbols



Warning

"If the contents of this symbol are ignored and the product is mishandled, the user may be at risk of death or serious injury."



Caution

"If the contents of this symbol are ignored and the product is mishandled, the user may be slightly injured or suffer only property damage."



Prohibition

This indication is a "prohibited" symbol that must not be done.



Instruction Execution


This indication is a "forced" symbol that must be executed.

\* Property damage refers to extended damage to the house and household goods, livestock and pets.

Warning			
	<b>Do not install in a bathroom or other location subject to water, or in a humid place where water droplets may form on the surface.</b> * Doing so may cause a fire or malfunction.		<b>Keep cigarettes, ashtrays, and other flammable items away from the product.</b> * Doing so may cause a fire. Also, if the sensor window is scratched, the product will not operate properly.
	<b>Do not apply water or detergent to the ceramic lid.</b> * Doing so may cause electric shock, fire or malfunction.  <b>Do not wash the entire product with water.</b> * Doing so may cause electric shock, fire or malfunction.		<b>Do not scratch, forcibly bend, pull, twist, bundle, or pinch the power line or product cord.</b> * Doing so may damage the power line, resulting in electric shock or fire.
	<b>Never disassemble, repair or modify the product except by a repair technician.</b> * Doing so may cause electric shock or fire.		
	<b>Do not touch the connector with wet hands.</b> * Doing so may cause electric shock.		





⚠ Caution		
 Prohibition	<p>If the urinal or ceramic lid is cracked or broken, never touch the damaged part.</p> <ul style="list-style-type: none"> <li>* You may be injured by the damaged part. Replace it as soon as possible.</li> </ul>	<p>Place the ceramic lid on a stable surface.</p> <ul style="list-style-type: none"> <li>* If the ceramic lid is placed on an unstable surface, it may fall during work and cause injury.</li> </ul>
	<p>Do not ride on the urinal or ceramic lid.</p> <ul style="list-style-type: none"> <li>* Doing so may result in damage and injury.</li> </ul>	
	<p>Do not impact the urinal or ceramic lid.</p> <ul style="list-style-type: none"> <li>* Doing so may result in breakage, injury, or property damage that may wet the building, household goods, etc. due to water leakage.</li> </ul>	<p>Do not place air fresheners, ice, etc. inside the urinal.</p> <ul style="list-style-type: none"> <li>* If air fresheners, ice, etc. block the drainage channel, they may cause the flushing water to overflow from the urinal and contaminate household goods.</li> </ul>
	<p>Do not pour boiling water into the urinal or ceramic lid.</p> <ul style="list-style-type: none"> <li>* Doing so may result in breakage, injury, or property damage that may wet the building, household goods, etc. due to water leakage.</li> </ul>	
	<p>Do not use the following detergents to clean the urinal (ceramic).</p> <ul style="list-style-type: none"> <li>* Strong alkaline detergents, fluorine-based detergents, detergents containing abrasives</li> <li>* They will scratch the ceramic surface.</li> <li>* Detergents and cleaning tools with water-repellent and surface-coating effects</li> <li>* The ingredients will cover the surface of the ceramic and the antifouling performance will not be achieved.</li> </ul>	<p>If the waste water in the urinal does not flow smoothly, the toilet drain or drain pipe may be clogged. If the urinal is used as it is, the flushing water may overflow and contaminate household goods, so please clean it.</p>
	<p>Do not use toilet detergent, household detergent, bleach, benzene, thinner, toilet wet wipes, cleanser, or cresol on the ceramic lid.</p> <ul style="list-style-type: none"> <li>* Doing so may cause electric shock, fire or malfunction.</li> </ul>	<p>Be sure to perform anti-freezing operation in locations where there is a risk of freezing.</p> <ul style="list-style-type: none"> <li>* The sensor will malfunction.</li> <li>* Freezing damage may cause fire, malfunction, or water leakage.</li> <li>* In the event of freezing damage, the product will be subject to repair at cost even within the warranty period.</li> </ul>
	<p>Do not put labels on or deface the sensor window.</p> <ul style="list-style-type: none"> <li>* The sensor will malfunction.</li> </ul>	<p>Supply water pressure is minimum 0.07 MPa (fluid) and maximum 0.75 MPa (hydrostatic).</p> <ul style="list-style-type: none"> <li>* If the water pressure is below the minimum, the flow rate may not be sufficient and the basin may not be cleaned. Exceeding the maximum water pressure may cause a failure.</li> </ul>
	<p>Do not use in locations where the temperature falls below 0°.</p> <ul style="list-style-type: none"> <li>* Freezing damage may cause fire, malfunction, or water leakage.</li> </ul>	<p>After new construction, repair work, or restoration of water service, be sure to remove air in the piping.</p> <ul style="list-style-type: none"> <li>* Using water supply equipment with air in the piping may cause damage or failure of the equipment or piping, resulting in injury or property damage that may wet the building, household goods, etc. due to water leakage.</li> </ul>



#### ■ Caution about each flushing function

The additional flushing, equipment protection flushing, and freeze protection flushing functions may cause flow on its own even when no one is present. If you wish to deactivate these functions, change the setting of the cleaning function.



#### ■ Safety Precautions for Dedicated Lithium Batteries

Make sure to observe the following. Failure to do so may cause leakage, rupture, ignition, heat generation, or equipment failure.

⚠ Warning	
<ul style="list-style-type: none"> <li>• If you dispose of the lithium battery incorrectly, it may short-circuit, generate heat, burst or ignite, causing injury or fire. Observe the following and dispose of the lithium battery properly in accordance with local government regulations.               <ul style="list-style-type: none"> <li>* Do not cut the wires.</li> <li>* Do not tear the outer tube.</li> <li>* Insulate the connectors with cellophane tape, etc.</li> </ul> </li> <li>• Always replace the lithium battery before 10 years have passed since installation.               <ul style="list-style-type: none"> <li>* Leakage, rupture, ignition, or heat generation may cause fire or injury.</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>• Do not forcibly discharge the battery.</li> <li>• Do not use batteries other than dedicated lithium batteries.</li> <li>• Do not recharge the lithium battery.               <ul style="list-style-type: none"> <li>* Failure to do so may cause leakage, rupture, heat generation, or equipment failure.</li> </ul> </li> <li>• Do not disassemble, process or modify the lithium battery.               <ul style="list-style-type: none"> <li>* Doing so may cause fire or equipment failure.</li> </ul> </li> <li>• Do not heat the lithium battery or throw it into fire.               <ul style="list-style-type: none"> <li>* Leakage, rupture, ignition, or heat generation may cause fire or injury.</li> </ul> </li> <li>• Do not short-circuit the lithium battery terminals with metal objects.               <ul style="list-style-type: none"> <li>* Doing so may cause fire or burns.</li> </ul> </li> </ul>	 Prohibition

⚠ Caution
<ul style="list-style-type: none"> <li>• If the battery fluid leaks, wipe it clean. In case the liquid gets on your body, rinse thoroughly with water. Do not use a leaking battery.</li> <li>• Store the battery in a well-ventilated, dry, and cool place before using it in equipment, or when storing it after removing it from equipment.</li> </ul>

#### ■ Safety precautions for use of cleaning magnet switch (sold separately)

⚠ Warning
<ul style="list-style-type: none"> <li>• Keep the magnet away from people with electronic medical devices such as pacemakers and other electronic medical devices. Doing so may impair the proper operation of the medical device and may result in loss of life.</li> <li>• The magnet has a strong attractive force, so handle with care. Hands, fingers, etc. may get caught between a magnet and a magnet, or between a magnet and a magnetic object such as a piece of iron, a knife, or scissors, which may cause injury. Also, a strong shock from the attractive force may cause the magnet to crack and scatter, and pieces may get into your eyes.</li> <li>• Keep the magnet away from electronic devices. Doing so may affect instruments and control circuits, resulting in accidents or malfunctions.</li> </ul>

⚠ Caution
<ul style="list-style-type: none"> <li>• Keep the magnet away from floppy disks, magnetic cards, magnetic tapes, prepaid cards, tickets, cathode-ray tubes, etc. If the magnet is placed near magnetic storage media, the records may be destroyed.</li> <li>• Keep the magnet away from precision devices such as watches and mobile phones. Doing so may cause the equipment to malfunction.</li> <li>• Do not heat the magnet or use or store it in high temperatures.</li> <li>• Avoid using or storing the magnet in areas with water or moisture.</li> </ul>

#### ■ Caution against condensation

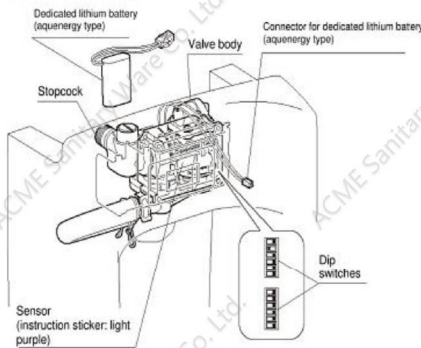
Water droplets may form on the surface of a urinal due to the difference between room temperature and urinal surface temperature and humidity (condensation). To prevent condensation, ensure adequate ventilation. If condensation water occurs, wipe off with a dry cloth.

\* Condensation water may stain or damage the floor.

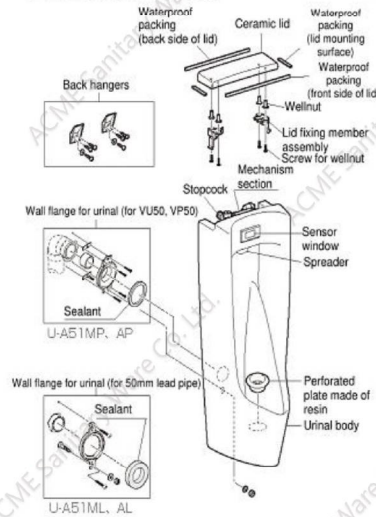


# Name of each part

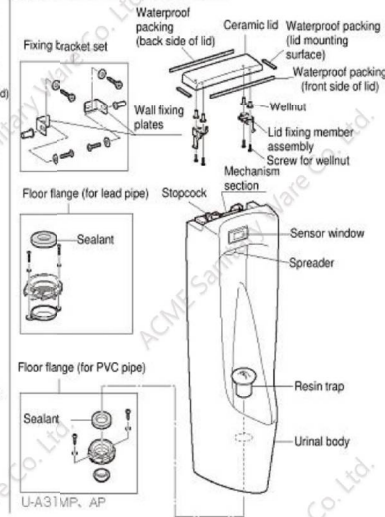
## [Mechanism section]



## [U-A51MP, ML (wall-hung type)]



## [U-A31MP, ML (floor-mounted type)]



## ■ Variations

	Drain pipe specification	Aquenergy type
Wall-hung (low rip)	PVC pipe (VP50, VU50)	U-A51MP
	Lead pipe (LP50)	U-A51ML
Floor-mounted	PVC pipe (VP50, VU50)	U-A31MP
	Lead pipe (LP50)	U-A31ML



## Features

### ■ Integrated sensor for a clean appearance

The sensor is built into the urinal, and the water supply pipe such as flash valves are not exposed, resulting in a clean appearance and easy cleaning.

### ■ Easy installation without electrical wiring

No power supply is required, eliminating the need for wiring and greatly reducing installation time.

### ■ Easy-to-clean urinal shape

The bowl surface of the urinal has a rimless shape, making it easy to clean every corner.

### ■ Easy-to-use urinal shape

The height of the drip tray is designed to allow easy use by people of all ages, from children to the elderly. The pointed shape of the drip tray makes it easier for the user to approach the urinal, preventing contamination from dripping.

### ■ highly sensitive sensor

There is almost no difference in detection between white and black, and both white and black clothes can be detected equally reliably.

### ■ High water saving effect

Super AI water-saving mode automatically adjusts the amount of cleaning water according to frequency and duration of use.

Compared to our conventional system (OK sensor), it can save approximately 75% of water. (Set to Super AI water-saving mode when shipped.)

### ■ Economical with aquenergy function

The built-in hydraulic power generator stores the energy of the cleaning water in the power supply circuit to power the sensor operation, making it economical.

### ■ Abundant washing functions

The product is equipped with a wide variety of washing functions, including a pre-wash function that washes for a few seconds just before use when it detects a user to prevent soiling, and a water-saving function that does not impair the user's experience.

### ■ Equipment protection and cleaning to protect equipment forever

Even if the product is not used for a long period of time, it automatically cleans after a certain period of time and performs the following functions. (Set to "Compatible with each water-saving mode" at the time of shipment)

- Prevents water sealant from running out due to natural drying and prevents odors from leaking into the room.
- Prevents urinary calculus buildup and prevents clogging of the urinal. (It is not effective in completely preventing the adhesion of urinary calculus or removing urinary calculus that has already adhered. Make sure to perform cleaning maintenance for removal of urinary calculus on a regular basis.)
- Prevents the sensor from running out of charge.

### ■ Anti-freeze function (factory setting is "No")

To prevent products from freezing and breaking due to cold winter temperatures in general areas, this function detects outside temperatures and dispenses water at regular intervals to prevent freezing.

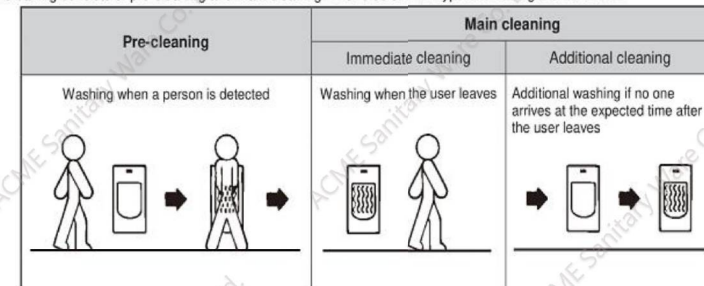
### ■ Cleaning and washing function

The optional cleaning magnet switch (Part No. A-3996) deactivates the sensor function, allowing the urinal to be cleaned without being detected by the sensor. After cleaning, the urinal is washed at the same time as the sensor function is restored, making it very convenient.



## Description of each function

Cleaning consists of pre-cleaning and main cleaning. The roles of each type of cleaning are as follows:



### ■ Pre-cleaning function

A cleaning function that is performed when the user is detected.

This function prevents urine from splashing and adhering and improves the cleaning effect. Pre-washing can also be eliminated to save water.

**Washing water volume:** Approx. 0.5 L

\* The factory default setting is "Pre-wash".

For details, refer to "Dip switch settings" (P.18-P.20).

### ■ Main washing function

This is a washing function that is performed after the user has left.

It washes the bowl surface and replaces the sealed water in the trap.

The main washing is divided into immediate washing and additional washing.

#### <Immediate washing>

Washing is performed immediately after the user leaves.

The frequency of use and duration of use are measured, and the water volume is set to the lowest level necessary to prevent the next user from smelling urine.

#### <Additional washing>

Additional flushing is performed when the next user does not arrive at the expected time after the user leaves.

\* Washing is performed in 0.25 to 8 hours in AI water saving mode and 0.25 to 2 hours in Super AI water-saving mode.

\* The factory default setting is "Super AI water-saving mode". To change the setting of this washing function, refer to "Dip switch settings" (P.18-P.20).

### ■ Amount of water used per washing mode

Main cleaning Mode	Immediate	Additional
Super AI water-saving	0.8-2L	0-1.2L
AI water-saving	2-4L	0-2L
Fixed	4L	-



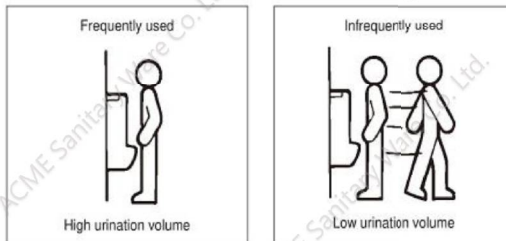


### • What is Super AI water-saving mode?

This function adjusts the amount of water used for washing according to the frequency of use and time of use to save water. Based on the frequency of use up to the previous user, the system predicts the free time until the next person uses the urine.



The system estimates urination volume based on urinal usage time.



Minimal amount of water is used for cleaning to prevent the next user from smelling urine odor.

**Washing water volume:** Automatically adjusts between 0.8-2L (2-4L in AI water-saving mode)

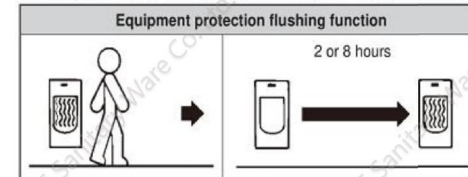
\* If the next person does not arrive by the predicted time, additional washing is performed to maintain cleanliness. (0-1.2L)

(0-2L in case of AI water-saving mode)



### ■ Equipment protection flushing function

This function automatically flushes 2 or 4 liters of water 2 or 8 hours after the last use to prevent the trap from running out of sealed water and to prevent urinary calculus from adhering to the pipes.



Main cleaning	Cleaning interval	Amount of washing water
Super AI water-saving mode	2 hours	2L
AI water-saving mode	8 hours	4L
Fixed mode	8 hours	4L

\* In addition, the "4L every 2 hours," "4L every 24 hours," and "Not" can also be set, regardless of the main cleaning. However, if "4L every 24 hours" or "Not" is set, urinary calculus builds up in the drainpipe, causing it to clog more easily. Also, a urine odor may be detected.

In the case of the aquenergy type, if the battery charge becomes insufficient at any setting other than "Not", the time interval for equipment protection cleaning and the amount of water to be washed will also be automatically switched to ensure that the battery charge is sufficient to keep the unit running.

### ■ Anti-freeze function

To prevent products from freezing and breaking due to cold winter temperatures in general areas, this function detects outside temperatures and dispenses water at regular intervals to prevent freezing.

- \* The factory default setting is "no freeze protection", but if you wish to change this setting, refer to "DIP switch settings" (P.18-P.20).
- \* Cold climates are not supported. If used in cold regions, the product may be damaged due to freezing.

**Caution**

If there is a risk of freezing, be sure to perform anti-freeze operation.

- \* The sensor will malfunction.
- \* Freezing damage may cause fire, malfunction, or water leakage.
- \* In the event of freezing damage, the product will be subject to repair at cost even within the warranty period.



Magnet switch for cleaning (Part No.: A-3996)

### ■ Cleaning and washing function

The sensor function can be stopped by using the optional cleaning magnet switch (Part No. A-3996) to clean without sensor detection, and can be activated with a single touch.

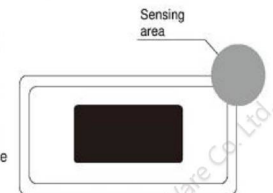
\* The red lamp on the front of the unit blinks while the sensor function is stopped.

If the cleaning magnet switch is brought close to the sensor for at least 1 second, the sensor function will stop after one cleaning wash. Refer to the figure on the right (shaded section) for the position to move the magnet switch closer to the sensor.

\* After 4 minutes of deactivation, the unit will be restored by cleaning automatically once.

\* If the cleaning magnet switch is approached again within 4 minutes, the unit will be restored after one cleaning cycle. If the unit is still sensing at this time, the one cleaning cycle will be canceled upon restoration.

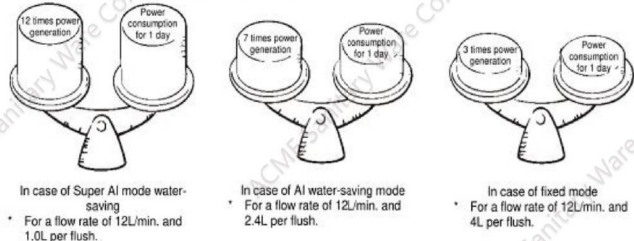
\* 4 liters of cleaning water will flow in any main cleaning mode.





## Aquenergy function

This product has a built-in generator that uses wash water, and the generated energy is stored in the power supply circuit. The amount of power generated is as follows:



If the product is not used for a long period of time or if the flow rate/water volume is low, the voltage of the power supply circuit will drop and the battery will be undercharged. In this case, the speed of sensing will automatically slow down. In addition, the time interval for equipment protection cleaning and the amount of water to be cleaned will be automatically switched to ensure the amount of charge to continue operation.

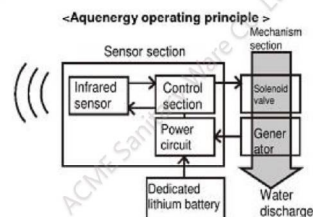
Main cleaning settings	Item	Sufficient charge	Insufficient charge
Super AI water-saving mode	Number of times used per day	12 times or more	11 times or less
	Water volume for main cleaning	0.8-2L	6L
	Interval for equipment protection cleaning	2 hours	
	Water volume for equipment protection cleaning	2L	6L
AI water-saving mode	Number of times used per day	7 times or more	6 times or less
	Water volume for main cleaning	2-4L	6L
	Interval for equipment protection cleaning	8 hours	2 hours
	Water volume for equipment protection cleaning	4L	6L
Fixed mode	Number of times used per day	3 times or more	2 times or less
	Water volume for main cleaning	4L	6L
	Interval for equipment protection cleaning	8 hours	2 hours
	Water volume for equipment protection cleaning	4L	6L
Speed of sensing		Quick	Slow
Guideline for replacing the dedicated lithium battery		10 years*	

\* Depending on the frequency of use, the battery may last practically for more than 10 years, but even in such cases, there is a possibility of liquid leakage, etc., so replace the dedicated lithium battery within 10 years. (The product warranty period for the dedicated lithium battery is 2 years.) Refer to "Replacing the dedicated lithium battery (Part No. A-4025) (in case of aquenergy type)" (P.17).

If the flow rate falls below the proper range (12 to 16L/min), the system cannot generate power, so the dedicated lithium battery is depleted and the system continues to operate. In this case, the estimated replacement time of the dedicated lithium battery is about 1 year under the condition of 100 times daily use.

Management is required to keep the flow rate within the proper range.

- Inspection and cleaning of strainer
- Refer to "Inspection and cleaning of strainer" (P.13).



Aquenergy: A system in which the operating power is supplied by a hydroelectric generator.

## Inspection and Adjustment

Remove the ceramic lid before performing inspections and adjustments.

### Removal and installation of ceramic lid

#### Caution

Place the ceramic lid on a stable surface before starting work.

\* If the ceramic lid is placed on an unstable surface, it may fall during operation and cause injury.

When lifting the ceramic lid, lift it slowly.

\* Lifting the lid too vigorously may damage the lid and cause injury.

When tightening the fixing bolt, align the center of the urinal and the ceramic lid, and tighten the bolt so that the center of the bolt does not shift.

\* Over-tightening on only one side may cause misalignment of the ceramic lid and urinal.

Do not loosen the fixing bolt too much.

\* If loosened too much, the ceramic lid may not be secured and may come off.

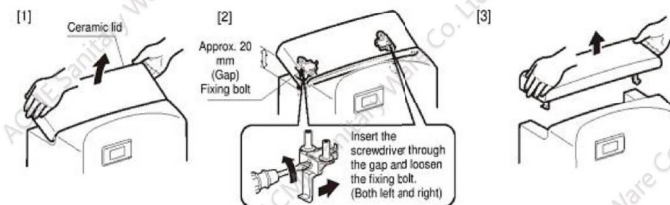
#### How to remove

[1] Lift up the rear part of the ceramic lid (approx. 20 mm).

[2] Look into the gap between the ceramic lid and the urinal, and loosen the fixing bolt that can be seen between them.

[3] Lift up the ceramic lid to remove it.

\* Be sure to lift the ceramic lid with both hands so as not to drop it.



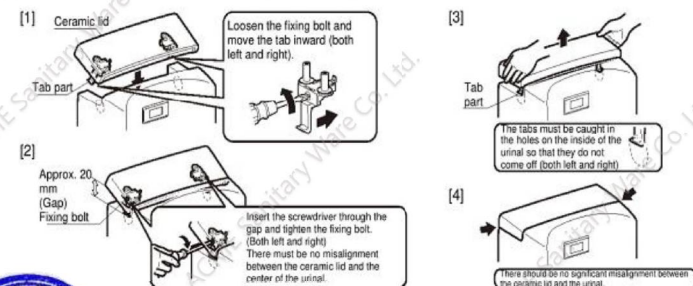
#### How to install

[1] Make sure that the tabs are facing inward, and place the ceramic lid with the front part down and the rear part up.

[2] Look into the gap between the ceramic lid and the urinal, and tighten the fixing bolt that can be seen between the ceramic lid and the urinal so that the centers of the ceramic lid and the urinal do not shift.

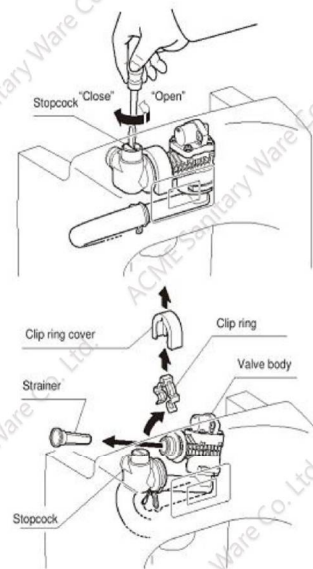
[3] Make sure that the ceramic lid does not come off when you lift it.

[4] Cover the ceramic lid so that there is no significant misplacement with the urinal.



### ■ Inspection and cleaning of strainer

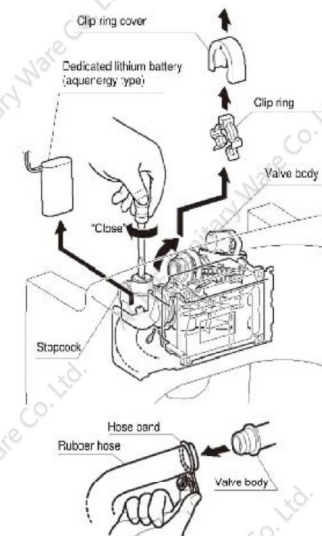
- [1] Turn the water stopcock to the right to close it.
- [2] Make the sensor sense the water once to confirm that the water is shut off.
- [3] Remove the clip ring cover and clip ring, and remove the valve body from the stopcock.
  - \* Residual water may spill from the stopcock and valve body. Use a rag or cloth to prevent water from spilling onto the terminal block or sensor.
  - \* Be careful that the clip ring does not fall off.
- [4] Pull out the strainer attached to the valve body and rinse it with water to remove any dust, etc.
- [5] Install the valve body in the reverse order.
  - \* After attaching the clip ring and clip ring cover, move them to confirm that they are securely connected.
- [6] Turn the stopcock to the left to fully open it.
- [7] Make the sensor sense the water, perform cleaning, and confirm that there is no water leakage at the valve body connection.



### ■ Inspection and replacement of solenoid valve and diaphragm

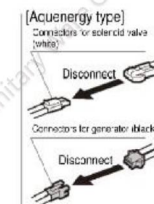
#### Removal

- [1] Turn the water stopcock to the right to close it and turn off the water.
- [2] Make the sensor sense the water once to confirm that the water is shut off.
- [3] Remove the dedicated lithium battery.
- [4] Remove the clip ring cover and clip ring, and remove the valve body from the stopcock.

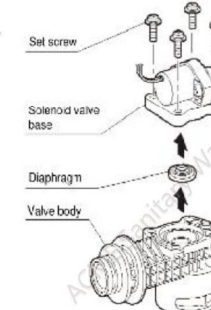


- [5] Open the hose band and remove the rubber hose from the valve body.

- [6] Disconnect the solenoid valve connector (white) and the generator connector (black).



- [7] Remove the four set screws of the solenoid valve, and remove the solenoid valve and diaphragm.





### inspection and replacement

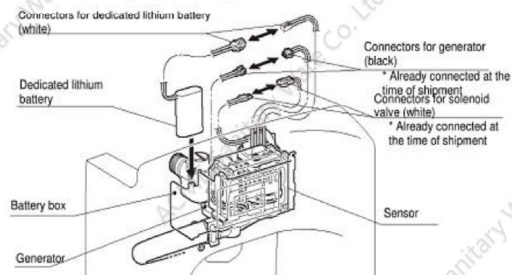
- [1] The solenoid valve may not operate properly if dust, etc. is stuck in the small hole of the diaphragm. If this occurs, remove the dust by blowing on it.
- [2] If the operation still does not return to normal, replace the diaphragm or solenoid valve.
  - \* The location of the small hole in the diaphragm is not related to its function.
  - \* Make sure not to mistake the front and back of the diaphragm.

### Installation

- [1] Install in the reverse order of removal.
  - \* When tightening the set screws, tighten them in the order farthest from the tightened point so that they can be tightened evenly.
- After installing the clip ring and clip ring cover, move them to confirm that they are securely connected.
- [2] Turn the stopcock to the left to fully open it.
- [3] Make the sensor sense the water, and confirm that there is no water leakage at the valve body connection and diaphragm.

### ■ Procedure for connecting each connector

- [1] Connect the dedicated lithium battery connector (white) from the sensor to the dedicated lithium battery connector (white) of the provided accessory.
- [2] Insert the dedicated lithium battery into the battery box inside the ceramic lid.

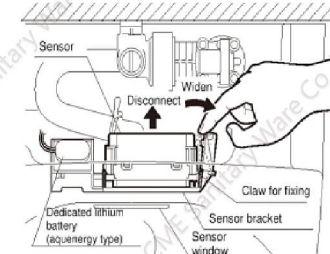


### ■ Sensor replacement

The sensor is mounted on the sensor bracket behind the sensor window.

#### How to remove

- [1] Disconnect each connector on the sensor side.
  - \* Refer to "Procedure for connecting each connector" (P.15).
- [2] Remove the dedicated lithium battery from the sensor.
  - \* Refer to "Replacing the dedicated lithium battery (Part No. A-4025) (in the case of aquenergy type)" (P.17).
- [3] Remove the sensor by widening the sensor fixing claw as shown on the right.



#### How to install

Install the sensor in the reverse order of removal.

- \* The sensor has an upper and lower side. Install the sensor with the upper mark on the sensor facing up so as not to install it upside down.

#### About waterproof cover

If it is difficult to work on the mechanism, open the waterproof cover by hand.

#### Caution

- Do not pull the connectors/cords forcibly.
  - \* If you pull it forcibly, the cord may be disconnected.
- Keep connectors/cords inside the waterproof cover after installation.
  - \* There is a risk of malfunction if water is splashed.



## ■ Replacement of dedicated lithium battery (Part No. A-4025)

When it is time to replace the dedicated lithium battery, the red light on the sensor will flash at one-second intervals (or at two-second intervals when the battery is about to run out). In this case, remove the dedicated lithium battery from the connector on the sensor side and replace it.

If the sensor does not operate normally even when the red lamp is not blinking, the dedicated lithium battery may be dead, so replace the battery.

- Even if the battery does not run out, be sure to replace the dedicated lithium battery within 10 years of installation.
- The warranty period of the dedicated lithium battery is 2 years.

### ⚠ Warning

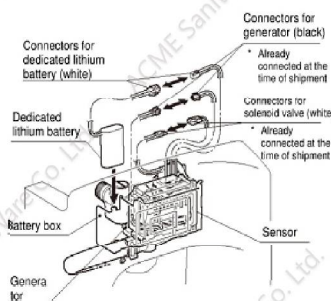
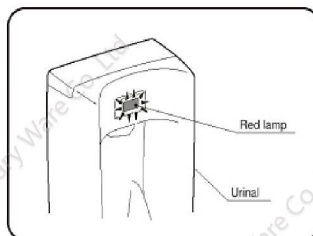
- If lithium batteries are disposed of incorrectly, they may short-circuit, causing heat generation, rupture, or ignition, which may result in injury or fire. Observe the following and dispose of the lithium battery properly in accordance with local government regulations.

- Do not cut electrical wires.
- Do not tear the outer tube.
- Insulate the connectors with cellophane tape, etc.

- Always replace the lithium battery before 10 years have passed since installation.

- Doing so may cause leakage, rupture, ignition, or heat generation, resulting in fire or injury.

Cellophane tape, etc.



	Estimated battery level			
	Enough	Low	Almost running out	None
	1.9V or more	1.9V-1.5V	1.5V-1.0V	1.0V or Less
Red lamp flashing	No	1 sec. interval	2 sec. interval	No
Cleaning	Possible	Possible	Impossible	Impossible



## ■ Dip switch settings

The DIP switches are factory-set as follows:

- Pre-cleaning ..... Yes
- Main cleaning ..... Super AI water-saving mode (0.8-2L)
- Equipment protection cleaningCompatible with each water-saving mode
- Freeze prevention ..... No
- Sensing distance ..... Approx. 400 mm
- Initial cleaning (for 100 V type) ..... No
- Pre-cleaning fixed time ..... 1 sec.

The cleaning mode can be changed as needed. The possible selections for each setting are shown below.

### Pre-cleaning settings

Can be set to either "pre-wash" in which 0.5L of water is flushed or "No pre-wash".

### Main cleaning settings

Can be set to either "Super AI water-saving mode" which flushes 0.8 to 2L of water, or "AI water-saving mode" which flushes 2 to 4 L of water, the same as before, or "Fixed mode" which always flushes 4 L of water.

### Equipment protection cleaning settings

Can be set to "Compatible with each water-saving mode", "4L every 24 hours", "Not", or "4L every 2 hours". The following washing specifications are available when "Compatible with each water-saving mode" is selected:

- Super AI water-saving mode: Automatically flushes 2L when there is no user for 2 consecutive hours.
- AI water-saving, fixed mode: Automatically flushes 4L when there is no user for 8 consecutive hours.
- If "4L every 24 hours" or "Not" is set, urinary calculus builds up in the drainpipe, causing it to clog more easily.

Also, urine odor may be noticed. Therefore, it is recommended that you use the "Compatible with each water-saving mode".

### Anti-freezing function settings

The user can select either "No freeze protection" or "Freeze protection". When set to "freeze protection", the unit detects the outside temperature and dispenses water at regular time intervals to prevent freezing and damage to the product due to cold weather in general winter regions.

- This product is not compatible with cold climates. If used in cold regions, the product may be damaged due to freezing.

### ⚠ Caution

If there is a risk of freezing, be sure to perform anti-freeze operation.

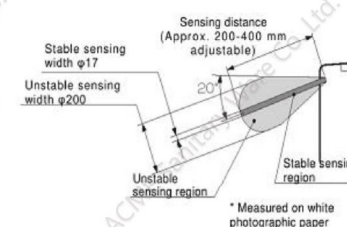
- The sensor will malfunction.
- Freezing damage may cause fire, malfunction, or water leakage.
- In the event of freezing damage, the product will be subject to repair at cost even within the warranty period.



### Sensing distance settings

The distance can be set to "approx. 200 mm", "approx. 300 mm", "approx. 350 mm", or "approx. 400 mm".

- The factory default setting is 400 mm.
- The image on the right shows the sensing area.
- The sensor's sensing distance varies depending on the environment and the color of the clothing. If the sensing is poor, set an appropriate distance.



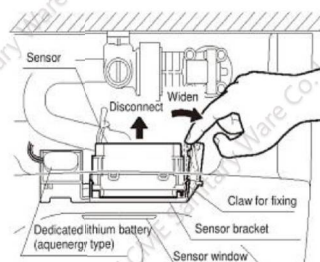
### Pre-wash fixed time setting

The time from when the sensor detects to when the pre-wash flows can be set to either "1 second" or "2 seconds".

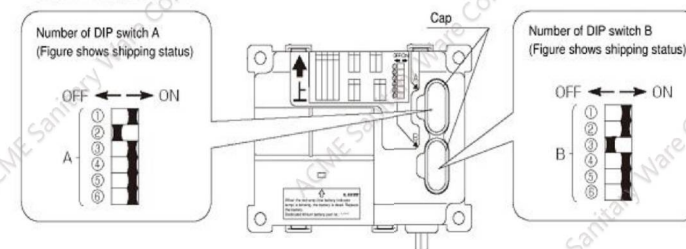
### How to change settings

The sensor is mounted on the sensor bracket behind the sensor window.

- [1] Disconnect each connector on the sensor side.  
\* Refer to "Procedure for connecting each connector" (P.15).
- [2] Remove the dedicated lithium battery from the sensor.  
\* Refer to "Replacing the dedicated lithium battery (Part No. A-4025) (in the case of aquenergy type)" (P.17).
- [3] Remove the sensor by widening the sensor fixing claw as shown on the right.



- [4] Remove the cap on the front side of the sensor and use a small flat-blade screwdriver, etc. to turn the dip switch ON and OFF to the left and right to change the settings. Each function and the corresponding switch position are shown in the table below.



Function		Operation	
DIP switch A	Switch [1] Pre-cleaning settings	[1] <input type="checkbox"/> <input type="checkbox"/> Pre-cleaning	
		[1] <input type="checkbox"/> <input type="checkbox"/> No pre-cleaning	
	Switch [2] [3] Main cleaning settings	[2] <input type="checkbox"/> <input type="checkbox"/> AI water-saving mode	
		[2] <input type="checkbox"/> <input type="checkbox"/> Super AI water-saving mode	
		[3] <input type="checkbox"/> <input type="checkbox"/> No features (do not set)	
		[3] <input type="checkbox"/> <input type="checkbox"/> Fixed mode	
	Switch [4] [5] Equipment protection cleaning settings	[4] <input type="checkbox"/> <input type="checkbox"/> Compatible with each water-saving mode	
		[4] <input type="checkbox"/> <input type="checkbox"/> No equipment protection cleaning	
		[5] <input type="checkbox"/> <input type="checkbox"/> 4L every 24 hours	
		[5] <input type="checkbox"/> <input type="checkbox"/> 4L every 2 hours	
	Switch [6] Antifreeze setting	[6] <input type="checkbox"/> <input type="checkbox"/> No freeze protection	
		[6] <input type="checkbox"/> <input type="checkbox"/> Freeze protection	
DIP switch B	Switch [1] [2] Sensing distance setting	[1] <input type="checkbox"/> <input type="checkbox"/> 400 mm	
		[2] <input type="checkbox"/> <input type="checkbox"/> 350 mm	
		[2] <input type="checkbox"/> <input type="checkbox"/> 300 mm	
		[2] <input type="checkbox"/> <input type="checkbox"/> 200 mm	
	Switch [4] Pre-wash fixed time setting	[4] <input type="checkbox"/> <input type="checkbox"/> Time from sensing to pre-cleaning: 1 sec.	
		[4] <input type="checkbox"/> <input type="checkbox"/> Time from sensing to pre-cleaning: 2 sec.	

\*Dip switches B [5] and [6] are not used.

- [5] After completing the settings, attach the removed cap, and then install the sensor in the original position in the reverse order of removal.  
\* The sensor has an upper and lower side. Install the sensor with the upper mark on the sensor facing up so as not to install it upside down.





## Care and Maintenance

For routine care, please pay attention to the following.

### ■ Resin made...detachable trap, perforated plate, spreader, sensor plate

Wipe off dirt with a soft, dry cloth. If the dirt still does not come off, moisten the cloth with water, or put a little soapy water on the cloth and wipe it, then wipe with a dry cloth. Do not use the following items. They may damage the surface. Also, return the detachable trap in the correct orientation. (See Figure \*1)

- Coarse-particle detergents such as cleansers, polishes, etc.
- Acid detergents, chlorine bleach
- Nylon scrubbers, brushes, etc.
- Solvents such as thinner and benzene



Warning	Caution
<p><b>Do not pour water around the ceramic lid or sensor plate.</b></p> <p>* Doing so may cause electric shock, fire or malfunction.</p>	<p><b>Do not use toilet detergent, household detergent, bleach, benzene, thinner, toilet wet wipes, cleanser, or cresol on the ceramic lid or sensor plate area.</b></p> <p>* Doing so may cause electric shock, fire or malfunction.</p>

### ■ Ceramic...urinal section, ceramic lid

- In the case of Aqua Ceramic specifications  
Aqua Ceramic is highly hydrophilic and makes it easy to remove adhered dirt, but does not make cleaning unnecessary.

[1] Care

Do not use the following detergent and tools.

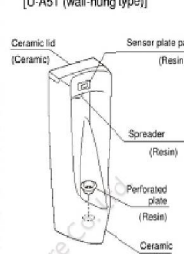
- Strong alkaline detergents or bleach, fluorine-based detergents (including hydrogen fluoride and ammonium fluoride)
  - \* Doing so will soak the ceramic surface and impair the function of the Aqua Ceramic.
  - Metal brushes, abrasive detergents and cleaning tools
  - \* The ceramic surface will be scratched and the function of Aqua Ceramic will be impaired.
  - Detergents and cleaning tools with water-repellent or surface coating properties
  - \* The ceramic surface will be covered by the ingredients and the Aqua Ceramic will not be effective.
- If they have become water-repellent through use, the effect can be restored by cleaning with a melamine sponge and mild dishwashing detergent.

### ■ Precautions about KILAMIC antibacterial products

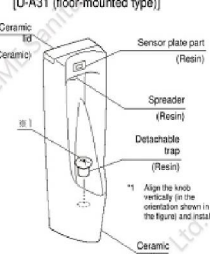
This product is a KILAMIC antibacterial product.

1. KILAMIC antibacterial products exert their antibacterial effect when bacteria adhere to the surface and inhibit the formation of stains caused by the action of bacteria.  
If dust, oil film, etc. covers the surface, the antimicrobial effect will not be sufficient against the bacteria adhering to the surface.
2. KILAMIC antimicrobial products inhibit the growth of bacteria, but this does not mean that the bacteria are completely eliminated.  
Therefore, this product does not completely prevent infection.

[U-A51 (wall-hung type)]



[U-A31 (floor-mounted type)]



### ■ Removal of urinary calculus

Although this product is effective in inhibiting the adhesion of urinary calculus through its equipment protection cleaning function, it is not effective in completely preventing the adhesion of urinary calculus or removing urinary calculus that has already adhered.

Make sure to perform cleaning maintenance to remove urinary calculus on a regular basis.

\* To remove urinary calculus, use a commercially available urinary calculus remover.



## Before asking for repair

### ■ If you think it might be a malfunction

The following cases are not malfunctions. It may be easily fixed, so please check the following items before requesting repair.

If the problem cannot be corrected after checking, remove the lithium battery, close the water stopcock, and contact the dealer where you purchased the product or LIXIL.

There may be a charge even during the warranty period, so please check the following items and the contents of the warranty.

Phenomenon	Inspection content	Inspection result	Action to be taken	Reference page
No water.	Is your water supply cut off?	Water is cut off.	Wait until it recovers.	
	Is the water stopcock open?	It is closed.	Fully open the stopcock.	
	Is there dust, etc. adhering to the strainer?	Dust adheres.	Remove dust, etc.	Inspection and cleaning of strainer (P.13)
	Is the sensor surface dirty?	Dirty.	Wipe off the dirt.	Care and Maintenance (P.21)
	Is there any obstacle in front of the sensor (sensing range)?	There is an obstacle.	Remove the obstacle. Adjust the sensing distance.	Dip switch settings (P.18-P.20)
	Is the sensor sensing distance properly adjusted?	Set at a short distance.	Adjust the sensing distance to an appropriate distance.	
	Is the solenoid valve connector connected?	Not connected.	Connect the solenoid valve connector.	Inspection and replacement of solenoid valve and diaphragm (P.14)
	Is the solenoid valve cord disconnected? Is the solenoid valve faulty? * Replace with a normal component and check.	Disconnected. Faulty.	Replace the solenoid valve.	
	Is the solenoid valve cord on the sensor side disconnected? * Replace with a normal component and check.	Disconnected.	Replace the sensor.	Sensor replacement (P.16)



Phenomenon	Inspection content	Inspection result	Action to be taken	Reference page
No water.	Is the dedicated lithium battery correctly connected to the sensor?	Not connected correctly.	Connect the dedicated lithium battery correctly.	Replacement of dedicated lithium battery (Part No. A-4025) (P.17)
	Is the power line of the dedicated lithium battery disconnected? * Replace with a normal component and check.	Disconnected.	Replace the dedicated lithium battery.	
	Is the sensor's red light (low battery indicator light) flashing every 1 or 2 seconds?	Flashes every 1 or 2 seconds. (It is time to replace the battery.)		
	Is the dedicated lithium battery dead?	The red light on the sensor is not flashing, but the unit is not working properly.		
	Is the power line on the sensor side disconnected? Or is the sensor faulty? * Replace with a normal component and check.	Disconnected. Faulty.	Replace the sensor.	
	Water won't stop.	Is dust stuck in the diaphragm?	Dust is stuck.	Remove dust from the diaphragm.
Is the small hole in the diaphragm clogged with dust?		Dust is stuck in the small hole.	Remove dust from the small hole in the diaphragm. Or replace the diaphragm.	
Is the solenoid valve faulty? * Replace with a normal component and check.		Faulty.	Replace the solenoid valve.	Sensor replacement (P.16)
Is the sensor faulty? * Replace with a normal component and check.		Faulty.	Replace the sensor.	
Low flow rate	Is the stopcock closed too much?	Closed too much.	Fully open the stopcock.	Inspection and cleaning of strainer (P.13)
	Is there dust, etc. adhering to the strainer?	Dust adheres.	Remove dust, etc.	
Water flows on its own	One of the following functions is working: Additional flushing, equipment protection flushing, or freeze protection flushing. If you wish to deactivate these functions, change the current setting of the cleaning function.			Description of each function (P.8) DIP switch settings (P.18-P.20)



## Specifications

Product No.	U-A51MP	U-A51ML	U-A31MP	U-A31ML
Urinal	Wall-hung type		Floor-mounted Type	
Product dimensions	370 (W) x 420 (L) x 1040 (H)		370 (W) x 420 (L) x 1140 (H)	
Product weight	Approx. 62 kg		Approx. 68 kg	
Power supply	Self-powered (*Note 1) With dedicated lithium battery		Self-powered (*Note 1) With dedicated lithium battery	
Power consumption	4W or less at normal operation, 8W or less during valve operation			
Sensing distance	Adjustable in 4 steps from approx. 200 mm to 400 mm (approx. 400 mm at shipment)			
Sensing width	Approx. φ 200 mm			
Ambient operating temperature	0 to 40°C *Not for cold climates.			
Water supply pressure	Minimum required pressure: 0.07 MPa (fluid pressure), Maximum water pressure: 0.75 MPa (hydrostatic pressure)			
Water supply connection screw	F1/2 (Connect with Rc1/2)			
Drainage connection diameter	VU50, VP50	LP50	VU50, VP50	LP50
Pre-cleaning	Selectable from 1. Yes: 0.5L, 2. No (factory default: set to 1)			
Main cleaning	1. Super AI water-saving mode : 0.8-2L (at shipment) 2. AI water-saving mode : 2-4L 3. Fixed mode : 4L fixed			
Equipment protection cleaning	1. Super AI water-saving mode : Automatically flushes 2L if no user is present for 2 consecutive hours (set to 1 at shipment) 2. AI water-saving mode, fixed mode : Automatically flushes 4L when there is no user for 8 consecutive hours. * In addition, "4L flush every 2 hours", "4L flush every 24 hours", and "Not" can also be set regardless of the water-saving function. However, when "4L flush every 24 hours" or "no flush" is selected, urinary calculus builds up in the drain pipe, causing it to clog easily, and urine odor may be noticed. In addition, in the case of the aquenergy system, the dedicated lithium battery will be depleted faster because the amount of electricity generated will be reduced.			
Other water-saving features	• If a user is detected during the main cleaning, the flush is stopped. • No main cleaning if not sensed within 4 seconds of sensing.			
Cleaning function	Cleaning and washing can be performed with the optional cleaning magnet switch (Part No. A-3996) * OK-3RC (remote control for cleaning) is not compatible.			
Water used	Clean water, gray water (*Note 2)			

\*Note 1: The life of the backup lithium battery (Part No. A-4025) varies depending on usage conditions. To protect the device, replace it within 10 years after installation.

\*Note 2: When using the product with gray water, please note the following points:  
This product is designed to be corrosion-resistant so that it can be used in gray water.  
However, when using reclaimed water or miscellaneous water that contains a large amount of trash, scale, etc., please treat it by removing the trash, etc..

\* There is a range of water quality that can be used for gray water. For details, please refer to the following website.

Website: [https://iinavi.inax.lixil.co.jp/products/faucets/flush\\_cs/](https://iinavi.inax.lixil.co.jp/products/faucets/flush_cs/)



## After-sales service

### ■ Before asking for repair

Before asking for repair, refer to "If you think it might be a malfunction" (P23, P24).  
If the problem persists, contact the dealer where you purchased the product or LIXIL.  
Even if the problem is not a malfunction, consult with us in the following cases:

- If you still have questions even after following the instruction manual.
- Damaged wiring
- Overheated wiring

In the above cases, leaving the product as it is may lead to an unexpected accident. Please be sure to consult with us.



### ■ Please refer to the warranty

Check to see if the product is under warranty or if the warranty period has passed.

\* Please read the warranty card carefully, as there may be cases where repairs will be charged even during the warranty period.

The warranty period is **two years** from the date of installation.

### ■ When asking for repair

[Repairs during the warranty period]

Please be sure to present your warranty card at the time of repair. The product will be repaired in accordance with the provisions of the warranty card.

### ■ Minimum retention period of performance parts for repair

The minimum retention period of performance parts for repair is 10 years after discontinuation of production. Please note that parts may not be available for repair after the retention period.

\* Performance parts for repair are parts necessary to maintain the functionality of the product.



### ■ Recommendation for periodic inspections

Although there is a charge for this service, we recommend periodic inspections in the following cases:

- For products that have been used for 3 years even if there is no problem in use.
  - Used in hot spring areas and near the coast, where corrosion is particularly likely to occur
- For periodic inspection, please contact LIXIL.

### ■ If you have any questions about the product or after-sales service

Please contact the dealer where you purchased the product or our branch office, sales office, or customer service center near you.





## Test Report

### Test

Title: Testing of Vitreous china bowl urinals (rimless type)

Method: BS 5520: 1977

Report No.: J 27017B

Completion: 17 Sep., 2021

### Applicant (Information below provided by client)

Name:

Address:

### Sample (Information below provided by client)

Brand: INAX

Model: YU-A51MP/BW1

U-A51MP/BW1

Body marking:

**INAX**

Manufacturer: LIXIL Corporation

Origin: Japan

Description: Wall Hung Sensor Urinal



### Approved Signatory

Signature:

Name (title): Chung Siu Yu, Alan (Engineer)

Date: 05 Oct., 2021

Nutek Systems is a testing agency, accepted by the Water Supplies Department, for testing water supply fittings.

REPORT NO.: J 27017B

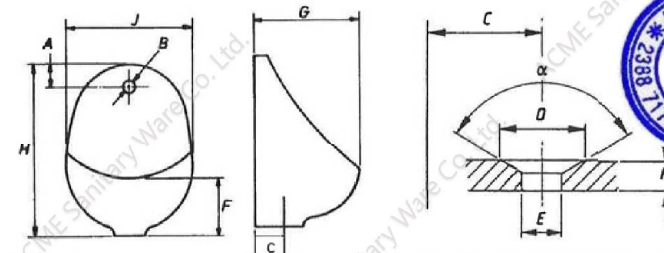
## Summary

Test	Remark
Dimensions	As shown in section 1

## Results (apply only to samples tested)

### 1 Dimensions

BS 5520: 1977



Variable	Denote	Unit	Measured
Dimensions from top of bowl to centre of water supply hole or spreader	A	mm	151.0
Diameter of water supply hole (when provided)	B		27.0
Centre of waste outlet from back of bowl	C		188.0
Dimension of outlet of the waste flange	D		73.0
Diameter of waste outlet	E		43.0
Distance from underside of waste outlet to lowest point of rim	F		249.0
Overall projection of bowl from back surface	G		417.0
Distance from underside of waste outlet to top of bowl	H		1035.0
Width of bowl at widest point	J		371.0
Depth of waste outlet	K		75.0



Figure 1 - Sample

REPORT NO.: J 27017B



Figure 2 - Body Marking



REPORT NO.: J 27017B

### General Note(s)

#### Definitions:

- C - conformance
- N - no requirement
- NC - non-conformance
- R - remainder

#### Organizations:

- WSD - Water Supplies Department (of Hong Kong)
- WHO - World Health Organization



- End of report -

## Test Report

### Test

Title : Testing of wall hung Urinal bowl  
 Method : BS EN 13407: 2015  
 Report No. : J 27017C  
 Completion : 23 Nov., 2021 to 18 Jan., 2022

### Applicant (Information below provided by client)

Name :  
 Address :

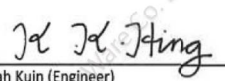


### Sample (Information below provided by client)

Brand : INAX  
 Model : U-A51MP/BW1 & YU-A51MP/BW1  
 Body marking : **INAX**

Manufacturer : LIXIL Corporation  
 Origin : Japan  
 Description : Wall hung Sensor Urinal

### Approved Signatory

Signature :   
 Name (title) : Hing Kah Kuin (Engineer)  
 Date : 08 Feb., 2022

Nutek Systems is a testing agency,  
 accepted by the Water Supplies  
 Department, for testing water supply  
 fittings.

REPORT NO.: J 27017C

## Summary

Test	Remark
1 Flushing volume and flow rate	C
2 Depth of water seal	C
3 Wash of bowl	C
4 Oversplashing	C
5 Discharge	C
6 Water Absorption	C



## Results (apply only to samples tested)

### 1 Flushing volume and flow rate

BS EN 13407: 2015 Cl. 4.2

Type	Variable	Unit	Measured	Required	Remark
II	Flushing volume	l	1.50	> 0.5, ≤ 5.0	C
	Flow rate	l/s	0.2	0.2 +0.2/-0.1	C
Overall result					C

### 2 Depth of water seal

BS EN 13407: 2015 Cl. 6.1

ID	Variable	Unit	Measured	Required	Remark
1	Depth of water seal	mm	52.0	≥ 50	C
Overall result					C

### 3 Wash of bowl

BS EN 13407: 2015 Cl. 6.2.1

ID	Variable	Unit	Measured	Required	Remark
1	1st flushing operation	mm2	0.0	---	---
	2nd flushing operation		0.0	---	---
	3rd flushing operation		0.0	---	---
	4th flushing operation		0.0	---	---
	5th flushing operation		0.0	---	---
	Average		0.0	≤ 80	C
Overall result					C

#### 4 Oversplashing

BS EN 13407: 2015 Cl. 6.2.3

ID	Variable	Unit	Measured	Required	Remark
1	Splash beyond the edge of bowl and wet the floor	---	No	No	C
Overall result					C

#### 5 Discharge

BS EN 13407: 2015 Cl. 6.2.4

ID	Variable	Unit	Measured	Required	Remark
1	Run over the rim of the bowl.	---	No	No	C
Overall result					C

#### 6 Water Absorption

BS EN 13407: 2015 Cl. 6.3

ID	Weight (kg)		Absorption (%)	Required	Remark
	Before Test	After Test			
Sample 1	21.8	21.8	0.08	1.00% max.	C
Sample 2	23.7	23.7	0.05		C
Sample 3	25.1	25.1	0.10		C
Average			0.08	0.75% max.	C
Overall result					C



Figure 1 - Sample



#### General Note(s)

##### Definitions:

- C - conformance
- N - no requirement
- NC - non-conformance
- R - remainder

##### Organizations:

- WSD - Water Supplies Department (of Hong Kong)
- WHO - World Health Organization

- End of report -



## Test Report

### Test

Title : Testing of Urinal  
Method : BS 3402: 1969  
Report No. : J27017D  
Completion : 24 Nov., 2021 to 03 Dec., 2021

### Applicant

Name :  
Address :



### Sample (Information provided by client)

Description : Wall Hung Sensor Urinal

Brand : INAX

Model : U-A51MP/BW

YU-A51MP/BW1

Body Marking :

**INAX**

Manufacturer : LIXIL Corporation

Origin : Japan

### Approved Signatory

Signature :

Name (title) : Tin Sin Yee, Cindy (Engineer)

Date : 21 Dec., 2021

Nutek Systems is a testing agency,  
accepted by the Water Supplies  
Department, for testing water supply  
fittings.

REPORT NO: J27017D

## Summary

Test	Remark
1 Visual Examination	C
2 Water Absorption	C
3 Craze	C
4 Chemical Resistance Test	C
5 Resistance to Staining and Burning	C



## Results (apply only to samples tested)

### 1 Visual Examination

BS 3402: 1969 Cl. 5.1, 5.4 & Table 2

Location	Blemish or defect	Maximum permitted	Remark
General	Wavy finish	None on all visible surfaces	C
	Warpage	Not more than 6mm	C
	Discoloration	None on all visible surfaces	C
Flushing surface and horizontal face of rims of WC pans bidets and urinals	Spots, blister and pinholes	A total of not over three; no grouping; for coloured appliances, blister and pinhole limited to one.	C
	Bubbles and specks	Not over two in one pottery square; a total of not over four	C
	Polishing marks	One only; none permitted for coloured figures	C
Visible surfaces other than above	Spots, blisters and pinholes	A total of not over five; no grouping; for coloured appliances, no blisters are permitted and pinholes are limited to a total of two	C
	Bubbles and specks	Not over three in one pottery square; a total of not over ten	C
Overall result			C

### 2 Water Absorption

BS 3402: 1969 Cl. 6

ID	Weight (g)		Absorption (%)	Required	Remark
	Before Test	After Test			
Sample 1	118.6	118.7	0.11	0.75% max.	C
Sample 2	128.6	128.7	0.07		C
Sample 3	138.3	138.4	0.11		C
Average			0.10	0.50% max.	C
Overall result					C

### 3 Crazing

BS 3402: 1969 Cl. 7

ID	Variable	Unit	Measured	Required	Remark
1	Saturated steam	MN/m <sup>2</sup>	0.34	0.33 - 0.35	C
	Duration	h	10	10	C
	Sample 1	----	No	No	C
	Sample 2	----	No		C
	Sample 3	----	No		C
Overall result					C

### 4 Chemical Resistance Test

BS 3402: 1969 Cl. 8

Table 4 — Chemical solutions

Name of Chemical	Strength of solution	Time	Temperature
	%	hours	°C
Acetic acid	10	16	100
Citric acid	10	16	100
Detergent (Note 1)	(Note 1)	48	60
Hydrochloric acid	(Note 2)	48	15 to 21
Sodium hydroxide	5	0.5	60
Sodium stearate	0.15	48	60
Sulphuric acid	3	16	100

NOTE 1 This consists of an aqueous solution containing 0.04 % (w/vol) of a condensation product of nonylphenol with 8-10 molecules of ethylene oxide. A suitable solution which contains 0.15% (w/vol) of the product is obtainable commercially under the trade name "Lissapol N".

NOTE 2 This solution consists of equal volumes of water and of hydrochloric acid of specific gravity 1.18.

ID	Solution	Time (h)	Temperature (°C)	Measured	Required	Remark
1	Acetic acid	16	100	No Loss	No loss of reflectivity on glaze	C
	Citric acid	16	100	No Loss		C
	Detergent	48	60	No Loss		C
	Hydrochloric acid	48	20	No Loss		C
	Sodium hydroxide	0.5	60	No Loss		C
	Sodium stearate	48	60	No Loss		C
	Sulphuric acid	16	100	No Loss		C
Overall result						C

### 5 Resistance to Staining and Burning

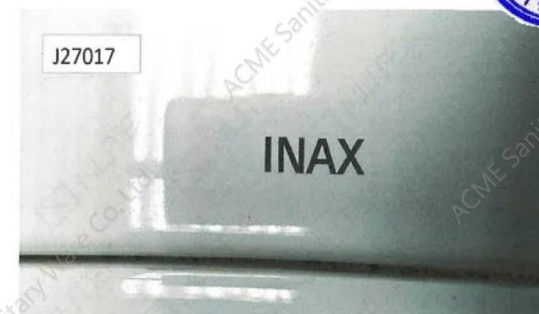
BS 3402: 1969 Cl. 9

ID	Variable	Unit	Measured	Required	Remark
1	Methylene blue	---	No Stain	No stain remains	C
	Sodium hypochlorite	---	No Stain		C
	Hydrogen peroxide	---	No Stain		C
	Amyl acetate	---	No Stain		C
	Iodine in ethanol	---	No Stain		C
2	Lighted cigarette	---	No Stain		C
Overall result					C

Figure 1 - Sample



Figure 2 - Body marking





REPORT NO: J27017D

### General Note(s)

#### Definitions:

C - conformance  
N - no requirement  
NC - non-conformance  
R - remainder

#### Organizations:

WSD - Water Supplies Department (of Hong Kong)  
WHO - World Health Organization



- End of report -



I certify this to be a true copy  
of the original document.

Signed:

Date: 2022-11-24

### Test Report

#### Test

Title: Testing of Urinal  
Method: HTM 64: 2006; BS 3402 & BS EN 274-1: 2002  
Report No.: J 27017E  
Completion: 24 Nov., 2021 to 03 Dec., 2021

Applicant (Information provided by client)

Name:

Address:

Sample (Information provided by client)

Description: Wall Hung Sensor Urinal

Brand: INAX

Model: U-A51MP/BW

YU-A51MP/BW1

Body Marking:

**INAX**

Manufacturer: LIXIL Corporation

Origin: Japan

#### Approved Signatory

Signature:

Name (title): Lam Kwai Wah, Terry (Operations Manager)

Date: 22 Nov., 2022

Nutek Systems is a testing agency,  
accepted by the Water Supplies  
Department, for testing water supply  
fittings.



## Summary

Test	Remark
1 Visual Examination	C
2 Water Absorption	C
3 Crazing	C
4 Chemical Resistance Test	C
5 Resistance to Staining and Burning	C
6 Water Seal	C

Note: Conformed to HTM64:2006 UR H/1/2/3 Urinal requirement



## Results (apply only to samples tested)

### 1 Visual Examination

BS 3402: 1969 Cl. 5.1, 5.4 & Table 2

Location	Blemish or defect	Maximum permitted	Remark
General	Wavy finish	None on all visible surfaces	C
	Warpage	Not more than 6mm	C
	Discoloration	None on all visible surfaces	C
	Spots, blister and pinholes	A total of not over three; no grouping; for coloured appliances, blister and pinhole limited to one.	C
Flushing surface and horizontal face of rims of WC pans bidets and urinals	Bubbles and specks	Not over two in one pottery square; a total of not over four	C
	Polishing marks	One only; none permitted for coloured figures	C
Visible surfaces other than above	Spots, blisters and pinholes	A total of not over five; no grouping; for coloured appliances, no blisters are permitted and pinholes are limited to a total of two	C
	Bubbles and specks	Not over three in one pottery square; a total of not over ten	C
Overall result			C

### 2 Water Absorption

BS 3402: 1969 Cl. 6

ID	Weight (g)		Absorption (%)	Required	Remark
	Before Test	After Test			
Sample 1	118.6	118.7	0.11	0.75% max.	C
Sample 2	128.6	128.7	0.07		C
Sample 3	138.3	138.4	0.11		C
Average			0.10	0.50% max.	C
Overall result					C

### 3 Crazing

BS 3402: 1969 Cl. 7

ID	Variable	Unit	Measured	Required	Remark
1	Saturated steam	MIN/m <sup>2</sup>	0.34	0.33 - 0.35	C
	Duration	h	10	10	C
	Sample 1	---	No	No	C
	Sample 2	---	No		C
	Sample 3	---	No		C
Overall result					C

### 4 Chemical Resistance Test

BS 3402: 1969 Cl. 8

Table 4 — Chemical solutions			
Name of Chemical	Strength of solution %	Time hours	Temperature °C
Acetic acid	10	16	100
Citric acid	10	16	100
Detergent (Note 1)	(Note 1)	48	60
Hydrochloric acid	(Note 2)	48	15 to 21
Sodium hydroxide	5	0.5	60
Sodium stearate	0.15	48	60
Sulphuric acid	3	16	100

NOTE 1 This consists of an aqueous solution containing 0.04 % (w/vol) of a condensation product of nonylphenol with 8-10 molecules of ethylene oxide. A suitable solution which contains 0.15% (w/vol) of the product is obtainable commercially under the trade name "Lissapal N".

NOTE 2 This solution consists of equal volumes of water and of hydrochloric acid of specific gravity 1.18

ID	Solution	Time (h)	Temperature (°C)	Measured	Required	Remark
1	Acetic acid	16	100	No Loss	No loss of reflectivity on glaze	C
	Citric acid	16	100	No Loss		C
	Detergent	48	60	No Loss		C
	Hydrochloric acid	48	20	No Loss		C
	Sodium hydroxide	0.5	60	No Loss		C
	Sodium stearate	48	60	No Loss		C
	Sulphuric acid	16	100	No Loss		C
Overall result						C

REPORT NO: J27017E

**5 Resistance to Staining and Burning**  
BS 3402: 1969 Cl. 9

ID	Variable	Unit	Measured	Required	Remark
1	Methylene blue	---	No Stain	No stain remains	C
	Sodium hypochlorite	---	No Stain		C
	Hydrogen peroxide	---	No Stain		C
	Amyl acetate	---	No Stain		C
	Iodine in ethanol	---	No Stain		C
2	Lighted cigarette	---	No Stain		C
Overall result					C

**6 Water Seal**

BE EN 274-1: 2002 Cl. 4.5

Variable	Unit	Measured	Requirement	Remark
Depth of water seal	mm	52	≥50 for partly filled discharge branches	C
Overall result				C

Figure 1 - Sample



REPORT NO: J27017E

Figure 2 - Body marking



**General Note(s)**

**Definitions:**

- C - conformance
- N - no requirement
- NC - non-conformance
- R - remainder

**Organizations:**

- WSD - Water Supplies Department (of Hong Kong)
- WHO - World Health Organization

- End of report -