



Acme Sanitary Ware Co. Ltd.

1/F, Acme Building, 22-28 Nanking Street, Kowloon, Hong Kong

Tel: 2388 7171 Fax: 2710 8012


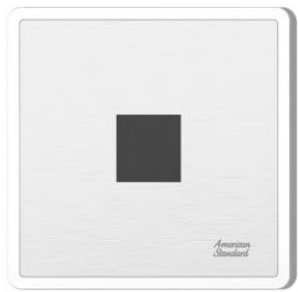
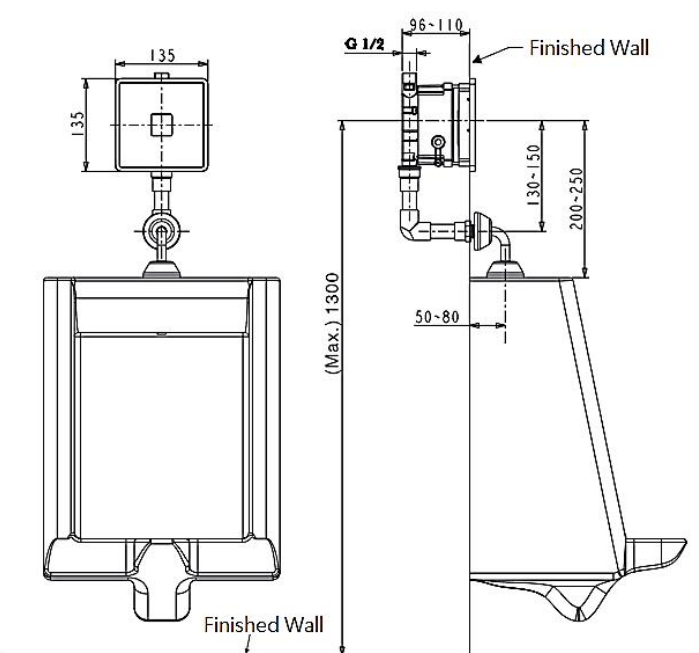
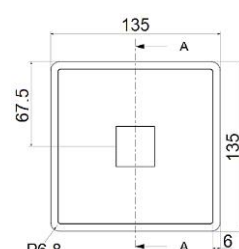
Email: acme@acmesanitary.com.hk

Website: www.acmesanitary.com.hk

American Standard

PROJECT		REF		REV	ITEM CODE	
LOCATION		DATE			PAGE	

SANITARY WARE SPECIFICATION SHEET

Item Descriptions	American Standard (PRC) 3 LPF PSD concealed urinal sensor flush valve; 220V AC supply with AC transformer; complied with BS EN 15091 & QB 2948-2008 ; test report 221176PC220064(1); nominated flow rate 1.2 L/cycle in WELS Grade 1; Registration No. 1U 23-0014	Illustration/ Drawing
Dimensions	L135 x W110 x H135 mm	
Model	FFAS8704-0S0500BF0 (Sensor) FF1-CN521X0030150P (Adaptor)	
Finish	Satin / Chrome Plated	
Manufacturer	American Standard (PRC)	
Source	Acme Sanitary Ware Co. Ltd Mr. Eric Wong/ Mr. Don Yuen	
Contact Tel/Fax	(852) 2388-7171 / (852) 2710-8012	
E-mail	acme@acmesanitary.com.hk	
Website	www.acmesanitary.com.hk	
		<p>Detail specifications</p> <ul style="list-style-type: none"> • PSD Concealed Urinal Sensor Flush Valve • Plastic body • Sensor distance: 60±15%cm • DC 6V /AC220V (Not included battery) • Standby energy consumption <0.2mW • Water inlet: G1/2" • Water pressure: 0.05~0.9MPa • Flow rate (L): 0.75~1.5, at 0.1MPa <p>Standards Criteria BS EN15091 /QB 2948-2008</p> 

Note: The Battery does not included.

* 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 23-0014




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



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	:	American Standard
型 號 / Model	:	FFAS8704-0S0500BF0
種 類 / Category	:	1
原產地 / Country or Region Origin	:	China

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>	:	1.2	公升/循環 <i>litres/cycle</i>

簽發日期：
Date of Issue: 9 June 2023

 水務署
Water Supplies Department



水務署署長(林麗恒代行)
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

40/F Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong

本署指
Our re
來函指
Your ref.



21/2022 T/J(1096/2022)

電話

Tel. :

傳真

Fax. :

2824 0578

22 December 2022



Dear Sir,

**Approval of “AMERICAN STANDARD” Sensor Flush Valve
(General Acceptance No. C20221162F)**

Your letter ref. WRC/2779 dated 23 September 2022 and subsequent submissions received by this department up to 24 November 2022 refer.

Having considered the test report ref. 220193PC220007B issued on 14 November 2022 by Fugro Technical Services 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: Jiangmen LIXIL AS Sanitary Fitting Manufacturing Co Ltd

Country of Origin: the Mainland of China

Brand: American Standard

Details of Fitting: 1/2" Sensor flush valve for urinal

Model: FFAS8704-0S0500BF0

Body Markings: *American Standard*

Expiry Date: 14 March 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



FUGRO TECHNICAL SERVICES LIMITED
Fugro Development Centre
5 Lok Yi Street, Tai Lam
Tuen Mun, NT
Hong Kong



Client Ref. : D/0003/22/FO/MH
Report No. : 221176PC220064(1)

Page 1 of 3

REPORT ON TESTING OF SENSOR FLUSH VALVE FOR URINALS

Information Supplied by Client

Client :
Client Address :

Project : Testing of Sensor Flush Valve for Urinals
Sample Description : 1/2" Concealed Sensor Urinal Flush Valve
Brand Name : American Standard
Model : FFAS8704-0S0500BF0
Body Marking : *American Standard*
Country of Origin : China
Manufacturer : Jiangmen LIXIL AS Sanitary Fitting Manufacturing Co., Ltd



Laboratory Information

Lab. Sample I.D. : PC220064/1
Date Received : 10 January 2022
Date Test Started : 21 March 2022
Date Test Completed : 23 May 2022
Test Method : Ref. to BS EN 15091 : 2013
By direct Measurement



FUGRO TECHNICAL SERVICES LIMITED
Fugro Development Centre
5 Lok Yi Street, Tai Lam
Tuen Mun, NT
Hong Kong



Client Ref. : D/0003/22/FO/MH
Report No. : 221176PC220064(1)

Page 2 of 3

Mechanical Endurance Test (Endurance Test of the Operating Mechanism) (BS EN 15091 : 2013 clause 6.8)

Test Cycle	Test Temperature (°C)	Test Pressure (bar)	Flush Volume and flow rate before 500000 cycles	BS EN Requirements		
				Test Temperature (°C)	Test Pressure (bar)	Flush Volume and flow rate
500000	23	2.5	Flow rate 0.16 l/s Flush Volume 1.15 l	<25	2.5±0.2	Flow rate min. 0.15 (l/s) Flush Volume 0.75-1.5 (l)

Test Cycle	Observation	Flush Volume and flow rate after 500000 cycles	BS EN Requirements	
			Observation	Flush Volume and flow rate
After 500000	The urinal flush valve was no leakage and no failure of any component part of it	Flow rate 0.15 l/s Flush volume 1.1 l In Change of Flush Volume 15%	No Component shall break, and the urinal flush valve shall continue to operate	Flow rate min. 0.15 (l/s) In Change of Flush Volume <25%

Leaktightness of Urinal Flush Valve Upstream of the Obturator (After 500000 cycles) (BS EN 15091 : 2013, Clause 4.6.4)

Applied Pressure (bar)	BS EN Requirement (bar)	Duration (sec)	BS EN Requirement (sec)	Observation	BS EN Requirement	Test Results
16	16±0.5	60	60±5	No Leakage at the obturator No Leakage or seepage through the walls	There shall be no leakage at the obturator and on leakage or seepage through the wall	Pass

Leaktightness of Urinal Flush Valve Downstream of the Obturator (After 500000 cycles) (BS EN 15091 : 2013, Clause 4.6.5)

Applied Pressure (bar)	BS EN Requirement (bar)	Duration (sec)	BS EN Requirement (sec)	Observation	BS EN Requirement	Test Results
4	4±0.2	60	60±5	No leakage or seepage through the walls	There shall be no leakage or seepage through the wall	Pass
0.2	0.2±0.05					

Remark : The report refers only to the sample(s) tested and the result(s) applied to the sample(s) as received.

Checked by : Date : 8 AUG 2022 Certified by : Date : 8 AUG 2022

Ng Shu Shing Chris
Assistant Manager (Plumbing Components)

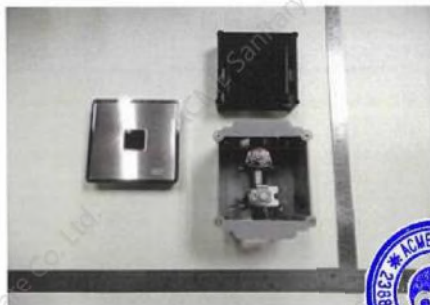


FUGRO TECHNICAL SERVICES LIMITED

Fugro Development Centre
5 Lok Yi Street, Tai Lam
Tuen Mun, NT
Hong Kong

Client Ref.: D/0003/22/FO/MH
Report No.: 221176PC220064(1)

Page 3 of 3



Test Sample



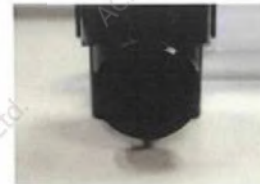
Valve Cartridge



Body Marking



Inlet



Outlet

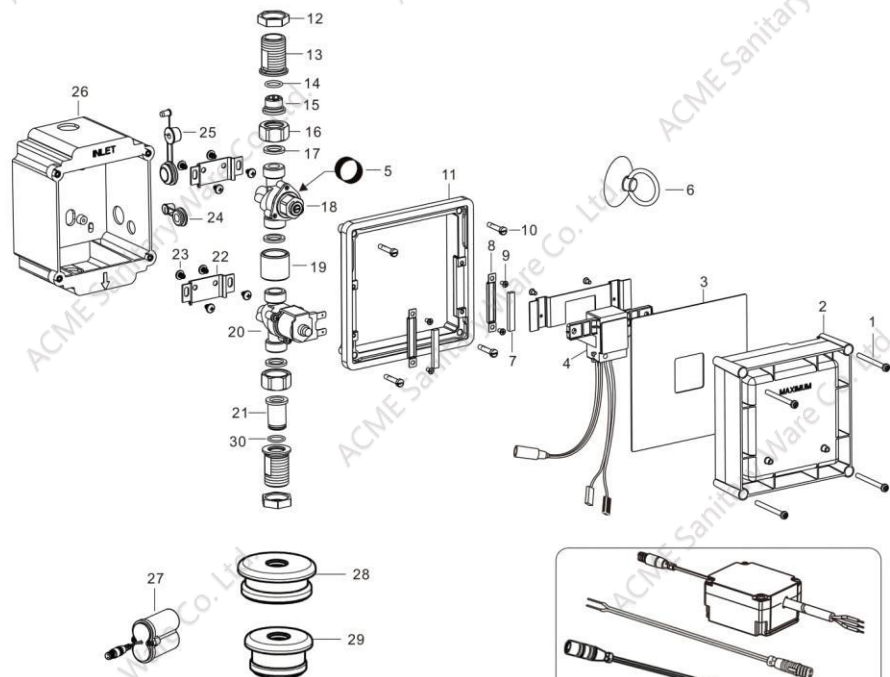
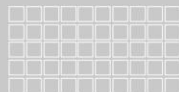
** End of Report **



FFAS8704-0S0500BF0
Concealed Sensor Urinal Flush Valve (DC)

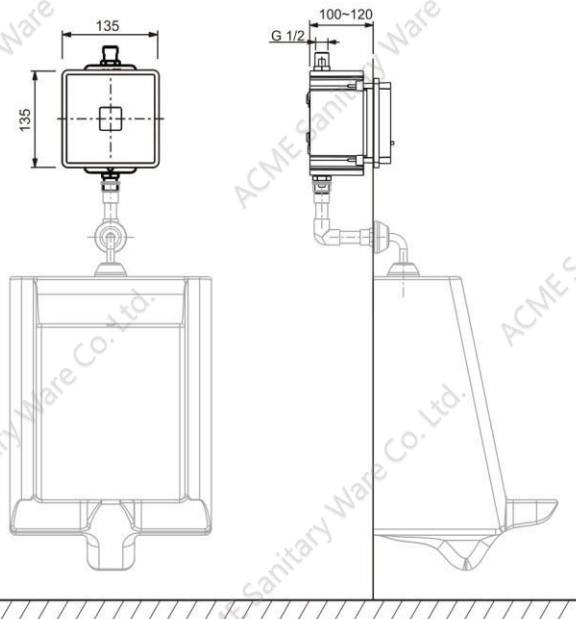


American Standard

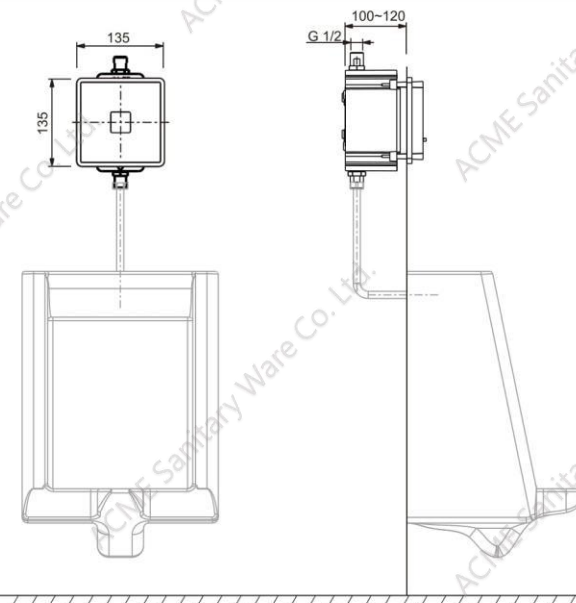


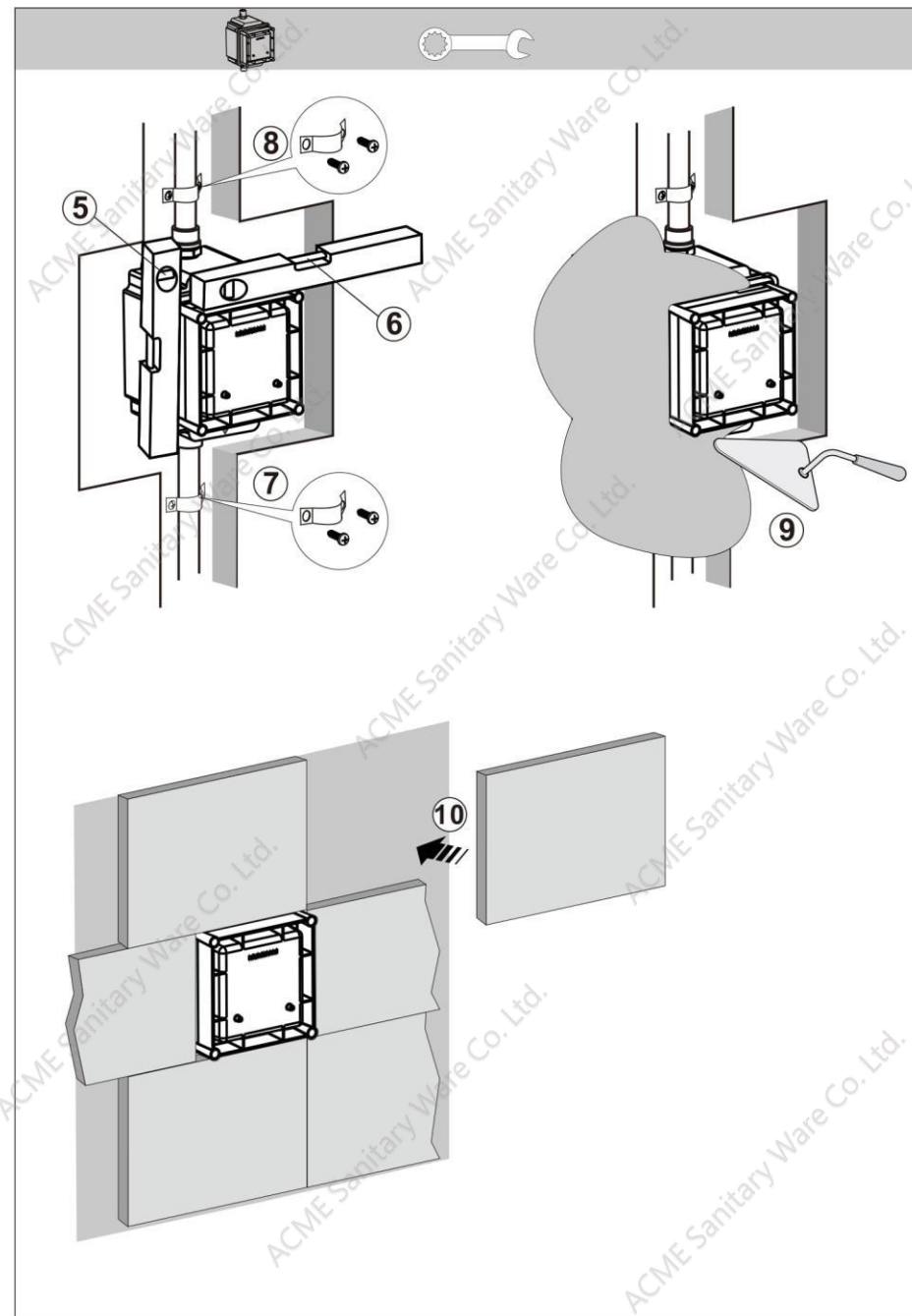
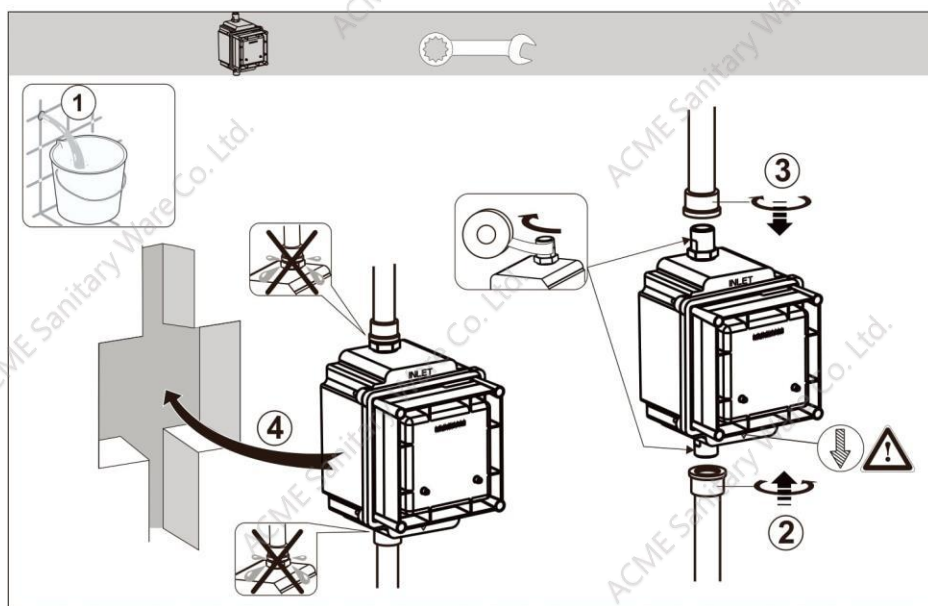
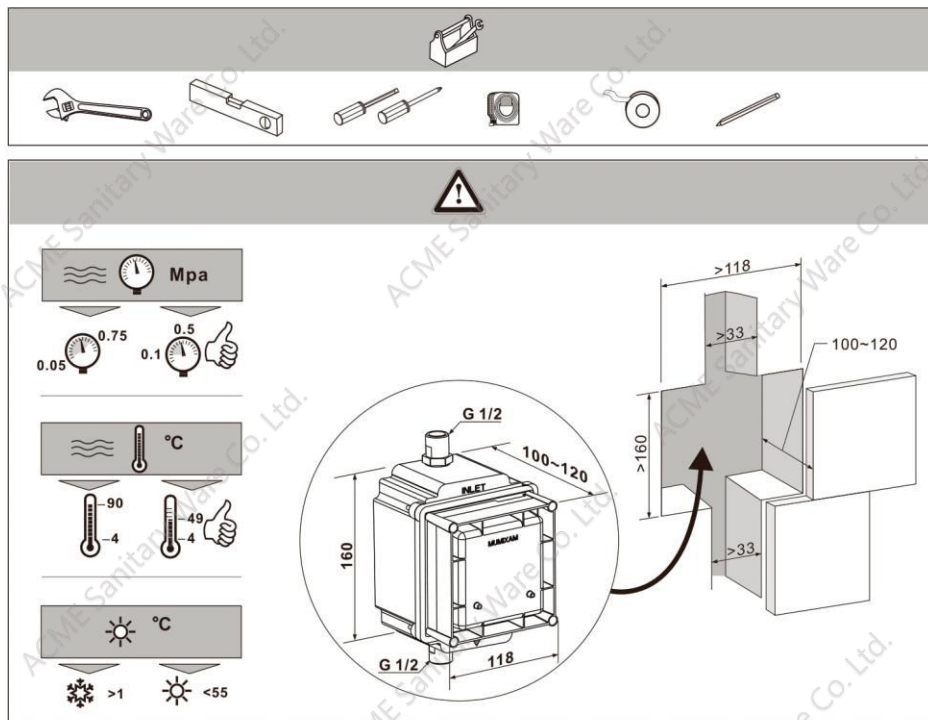
1	FF1-CN521N00000244	4	16	FF1-CN521N0009199S	2
2	FF1-CN521Z00000352	1	17	FF1-CN521G00000062	3
3	FF1-CN521C00000064	1	18	FF1-CN521Z00000038	1
4	FF1-CN521S00000199	1	19	FF1-CN521J00000299	1
5	FF1-CN521Z00000103	1	20	FF1-CN521S00000001	1
6	FF1-CN521Z00000268	1	21	FF1-CN521N0009399S	1
7	FF1-CN521Z00000460	2	22	FF1-CN521F00000181	2
8	FF1-CN521C00000066	2	23	FF1-CN521N00000131	8
9	FF1-CN521N00000133	6	24	FF1-CN521Z00000357	1
10	FF1-CN521N00000196	4	25	FF1-CN521G00000306	1
11	FF1-CN521C00000065	1	26	FF1-CN521S0002599P	1
12	FF1-CN521N0009299S	2	27	FF1-CN521S00000050	1
13	FF1-CN521J0026699S	1	28	FF1-CN521G00000061	1
14	FF1-CN521G00000145	1	29	FF1-CN521G00000065	1
15	FF1-CN521N0009099S	1	30	FF1-CN521G00000252	1

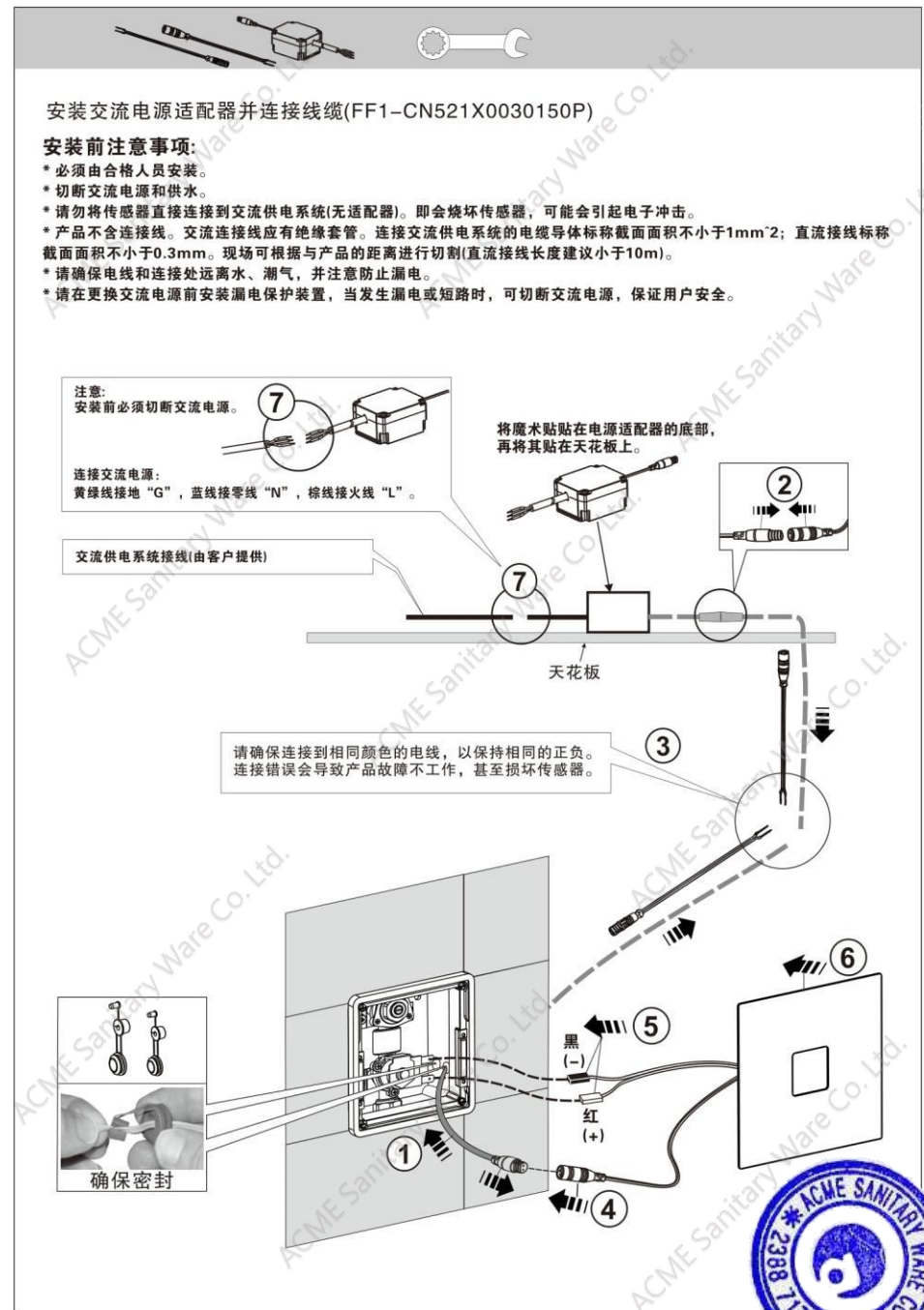
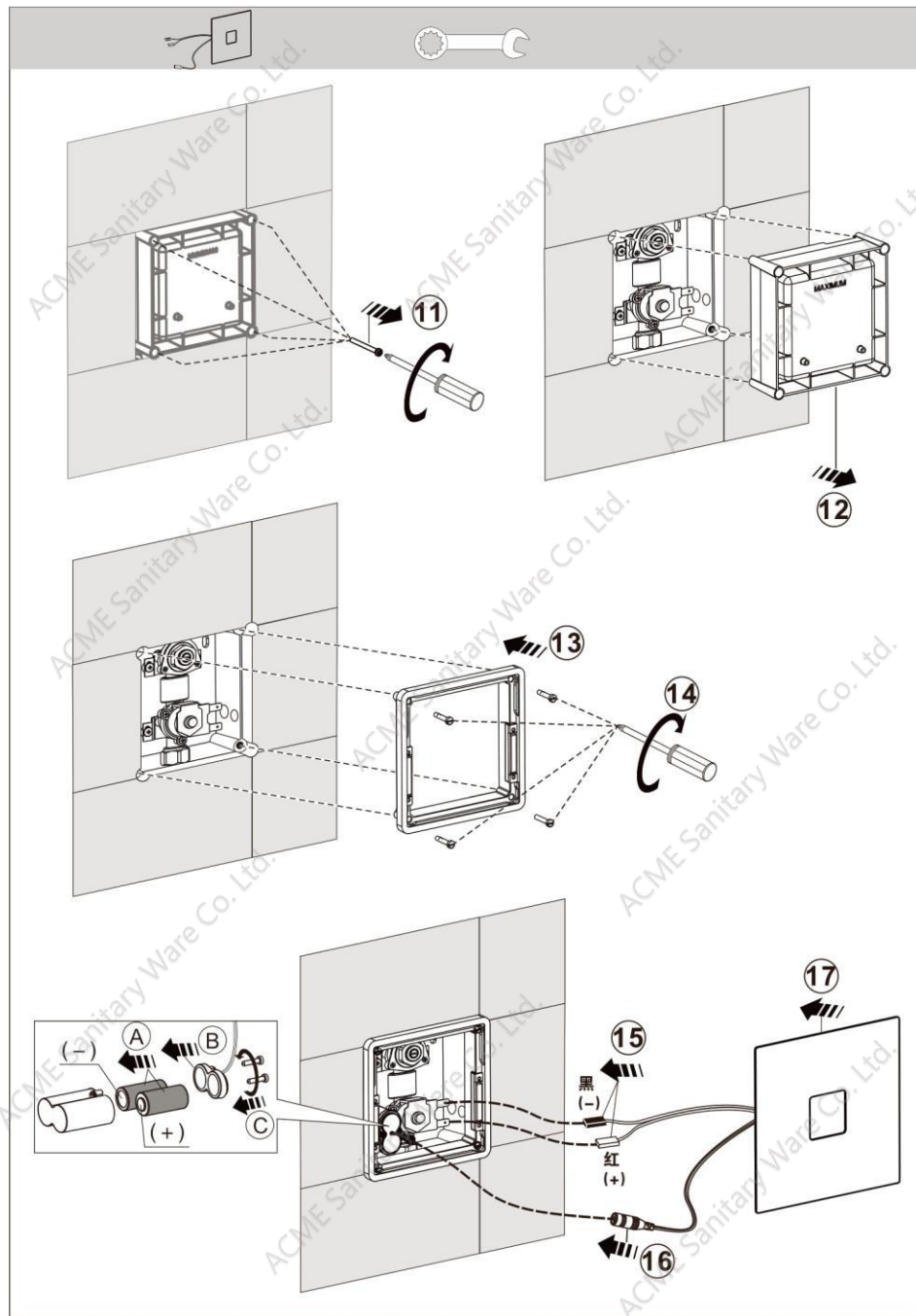
Top Inlet:



Back Inlet:







Installing the AC adaptor and connect the Cable (FF1-CN521X0030150P)

Notice Before Installing :

- * Must be installed by qualified people.
- * Cut off AC power supply and water supply.
- * Please don't connect sensor to AC power supply system directly (without adaptor) . That will burn up sensor, may be cause electronic shock .
- * Connection wires are not included in product . AC connecting wires should have insulating sleeve . The nominal section area of conductor for wires that connected to AC power supply system is not less than 1mm^2 . For DC connection wires, the nominal section area is not less than 0.3mm^2 . Wires can be cut at site according to the distance to product (The length of wires for DC connection is recommended less than 10m).
- * Please make sure to keep wires and connections away from water, moisture , and also protecting electricity leakage is request.
- * Leakage protector is requested to be installed before AC adaptor .It can shut off AC power to keep user safety when there is leakage or short circuit.

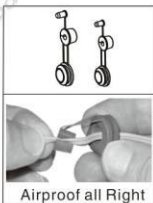
Notice:
AC power must shut off before finishing installation.

Connect to AC power system (green&yellow wire connected to ground("G"), blue cable connected to Null wires ("N"), brown wire connected to Live wire ("L") .)

Connecting wires to AC power supply system
(Provide by customer)

Attach the Velcro to the bottom of the AC adaptor, and attach the AC adaptor to the ceiling.

Please make sure connecting to the same color wire to keep the same positive or negative. Wrong connection will cause product not work , even damage sensor.



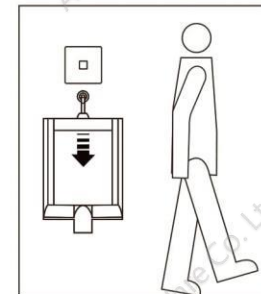
便器的安装 请参阅便器使用说明书

Urinal Installation

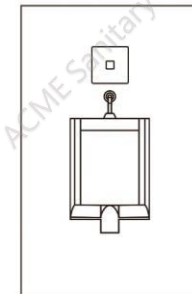
Please refer to the instruction manual of Urinal



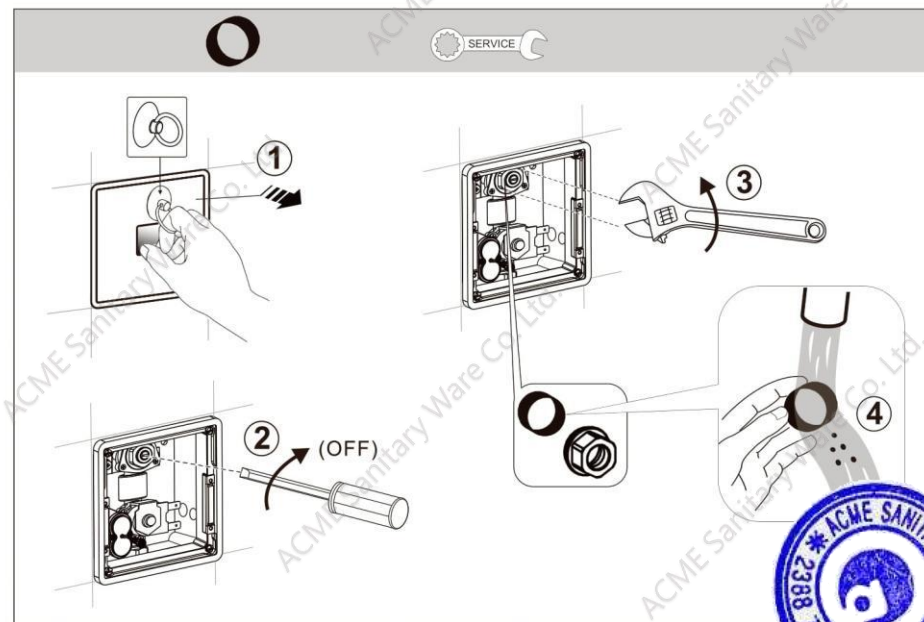
- * 用户进入感应区后，持续感应，此时设备不进水。
- * After the user enters the induction area, continuous induction, at this time the device does not water.



- * 当用户离开感应区域时，设备会自动冲水一次并停止。
- * When the user leaves the sensing area, the device will automatically Flush once and stop.



- * 待机
- * standby



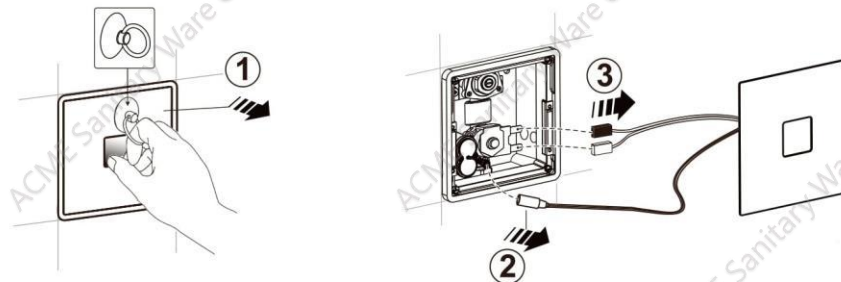
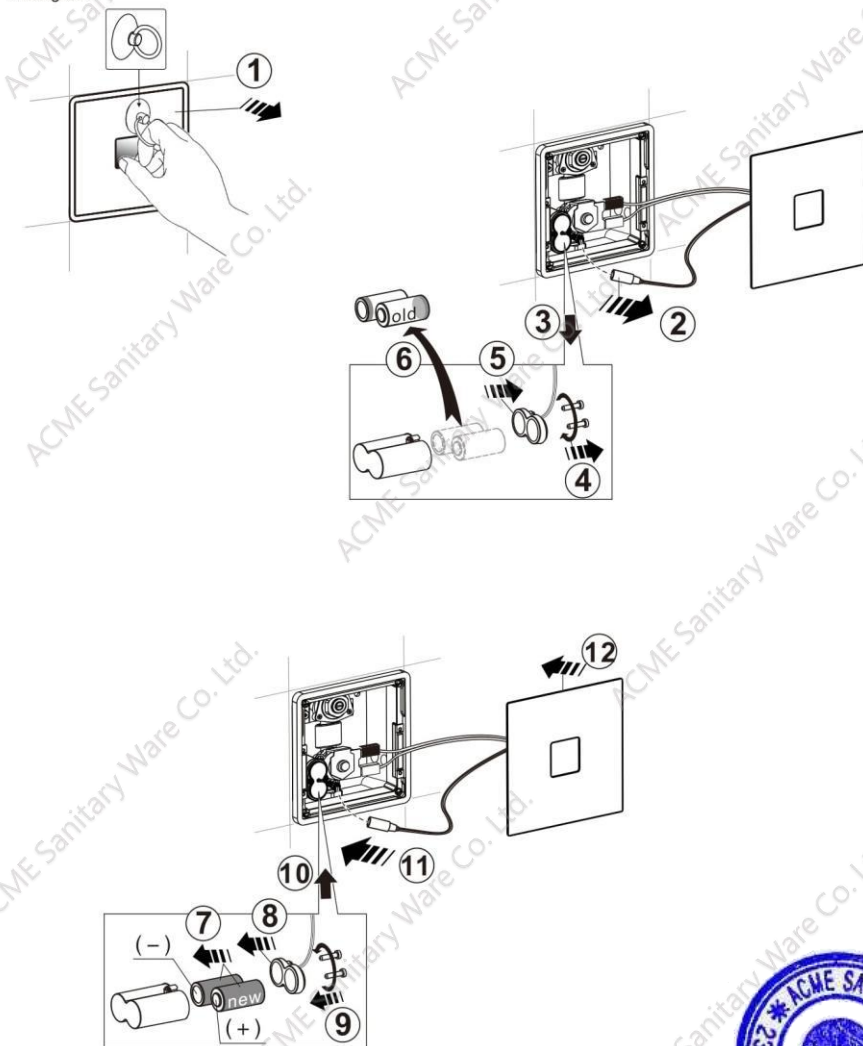


电池更换

*当传感器指示灯持续闪烁时，表示电池电量耗尽，需要更换。

Battery change

* When the sensor indicator light blinks continuously, it means the battery is completely consumed and should be changed.



感应头的一段式和两段式调整方法：

One-stage and two-stage adjustment method of sensor:



冲洗时间调整方法：

Washing time adjustment method:

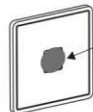




注意:

- * 开始前清除管道内所有杂质, 以免堵塞管道。
- * 检查尺寸图上的安装距离, 确保安装正确。
- * 不要将小便池安装在相对位置有其他传感器的地方, 如厕所自动冲洗设备。
- * 不要把小便池安装在有反光物体的地方, 例如不锈钢和镜子等。
- * 不允许敲打主要部件。
- * 应避免强烈的阳光直接照射传感器窗口。
- * 保持传感器窗口的清洁。
- * 用中性清洁剂或软布清洁传感器窗口。
- * 不可将有机溶剂直接喷洒到传感器窗口。

* 使用时, 请取下感应窗口上的防感应小标贴, 如右图:



防感应小标贴

规格:

型号	电源
	FFAS8704-0S0500BF0 (直流) / 2粒 3伏 锂电池
感应控制方式	PSD 感应头
感应距离	(柯达灰色卡片) $60 \pm 10\%$ cm
推荐工作压力	0.1 ~ 0.55Mpa
供水管直径	G 1/2"
环境温度	1°C ~ 55°C
使用水温	1°C ~ 45°C
检测时间	3 Seconds
冲洗时间	Flush 7 Seconds
冲洗水量	$\leq 1.5L$ (0.1MPa)
环境保护	24小时无人使用时自动冲洗1.5秒

故障排除

现象	原因	处理方法
无感应 不冲洗	无电源 无电池/电池装反 感应范围内有其它物体一直被感应 感应窗口较脏 接线端是否插好, 是否插错	检查电源 装好电池 清理物体 清洁窗口 插好接线端
有感应 不出水	截止阀是否关闭 感应范围内有其它物体 感应窗口较脏	打开截止阀 移开物体 清洁感应窗口
出水量少	截止阀是否彻底打开 过滤装置堵塞 水压太低	彻底打开截止阀 清洗过滤装置 与供水部门联系
不止水 指示灯连续闪烁而不出水	电磁阀部位有脏物 电池耗尽	清洗过滤装置(之后连续感应, 动作多次) 更换电池

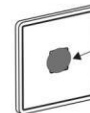
如果按以上自检后问题仍未解决, 请联系我司代理或我司。



Caution

- * Remove all impurities in pipes before beginning to avoid clogging.
- * Check installation distances in the Dimension diagram to ensure correct installation.
- * Do not install the urinal in a place which having other sensor opposite on the opposite position such as toilet automatic flush equipment.
- * Do not install the urinal in a place with any reflective object opposite, such as stainless steel and mirror etc.
- * Knocking on the main component is not allowed.
- * Strong sunlight should be avoided to irradiate the sensor window directly.
- * Keep the sensor window clean. Knocking on it is not allowed.
- * The sensor window should be cleaned with neutral detergent or soft cloth.
- * Organic solvent shouldn't spray directly to the sensor window.

* When using, please remove the sensor window to prevent sensor stickers.



Prevent sensor stickers

Specification

Type	Power Supply
	FFAS8704-0S0500BF0 (DC) / 2Pcs 3V Li Battery
Mode of the inducing	PSD Sensor
Range (Default)	(Kodak gray Card) $60 \pm 10\%$ cm
Recommend Working Pressure	0.1 ~ 0.55Mpa
Pipe Size	G 1/2"
Environment Temperature	1°C ~ 55°C
Acceptable Water Temperature	1°C ~ 45°C
Detect Time	3 Seconds
Flush Time	Flush 7 Seconds
Flush Volume	$\leq 1.5L$ (0.1MPa)
Environment protect	Will proceed auto-flush within 1.5 seconds if unoccupied over 24 hours

Trouble Shooting

Problem	Reason	Instruction For Solving
No Detection No Flush	No battery /battery run out / battery is installed incorrectly/no power supply Some object around the sensor is detected all the time Sensor window is dirty The connection is not connected correctly	Check the battery or the power supply Clear the object Clear the window Check the connection
Detect But No Flush	The stop valve is closed Some object around the sensor is detected all the time Sensor window is dirty	Open the valve Clear the object Clear the window
Low Flush Volume	The stop valve is not open entirely The filters are blocked Low water pressure	Open the valve entirely Clean the filters Check with local water supply department
Non-Stop Flushing	Battery run out The cables are cut off The solenoid is block	Check the battery Check the cables and the connection Clean the solenoid and the diaphragm
The sensor is blinking continuously without flush	Low battery	Change battery

If the problems remain unsolved after self-inspection, please contact our agent or our company.