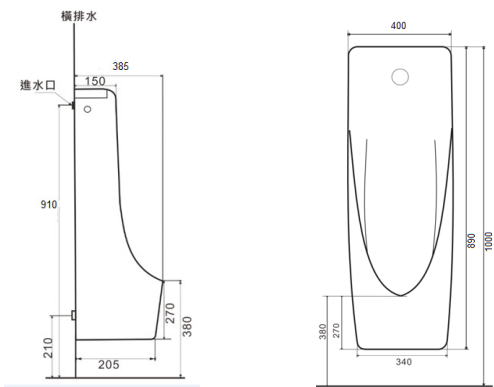




Brand : Bellini
 Model : 900/A + NG249522
 Color : White
 Size : 890 x 400 x 385mm
 Description : Wall mounted Urinal , back inlet & back outlet + Urinal Sensor
 Origin : PRC
 Remarks :



NG/249522 – 小便斗感應沖水器

功能與特點：

- 1) 預先清洗: 當人進入感應範圍, 先出第一段約 3 秒沖水, 預先清洗, 當人離開後, 再出約 7 秒沖水, 徹底清洗。
- 2) 防臭功能: 當小便斗長期不使用時, 沖水閥每隔 12 小時自動放水沖洗一次, 防止存水彎中存水乾枯, 導至臭氣回竄。
- 3) 自動調試: 機器控制線路超微型設計, 採用微電腦控制, 無須人為調試。
- 4) 多選電源: 具有 AC 加 DC 共用功能, 任何一方停電亦能正常操作, 亦可單獨選擇 AC / DC <如沒有 AC 電, 不須安裝變壓器(火牛)>
- 5) 節能省電: 本產品使用 4 節 5 號鹼性電池供電, 按每天使用 300 次計算, 兩年內無須更換電池。

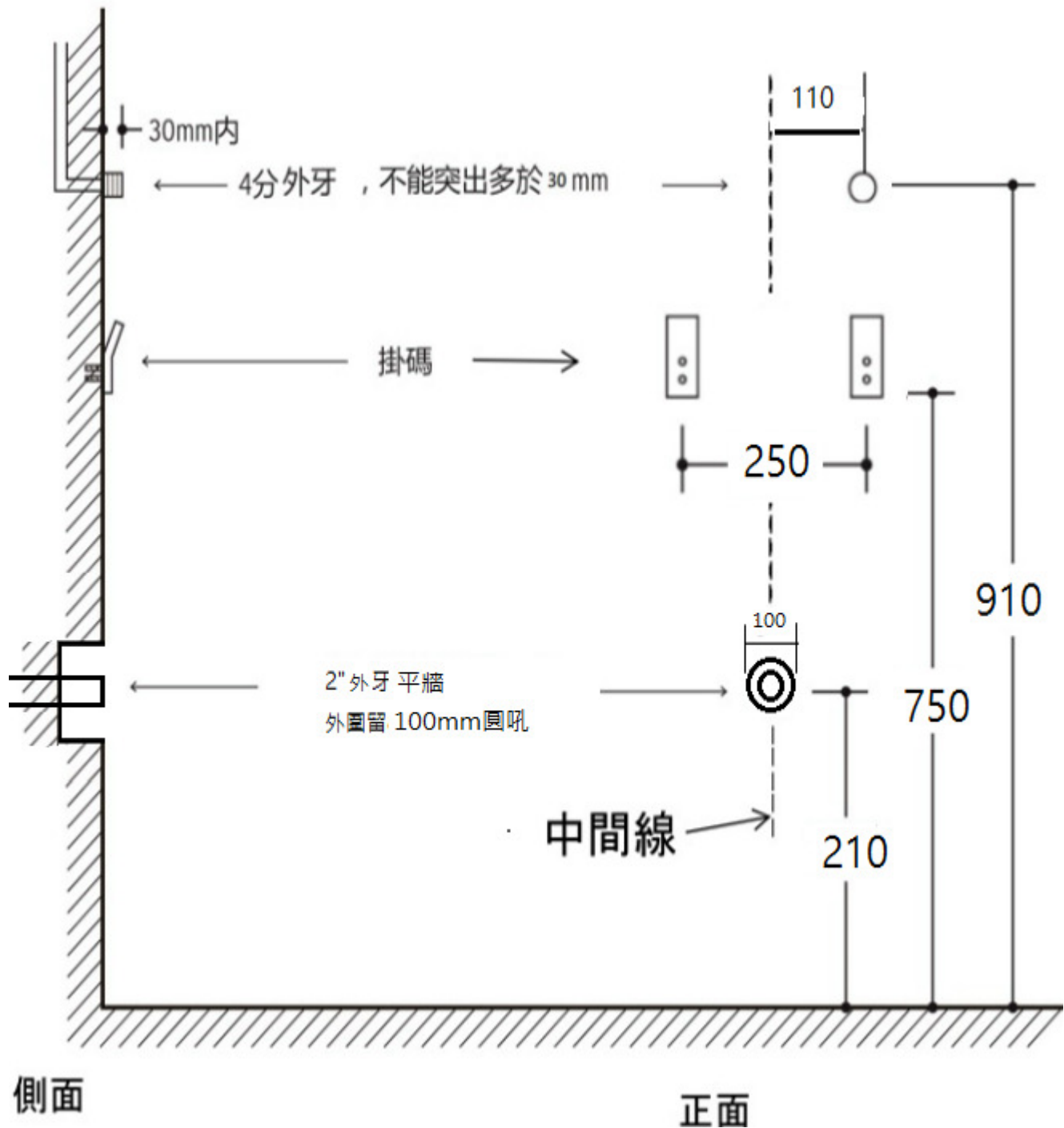
技術指標參數：

- 1) 供電電源: AC 220 (50/60Hz)
DC 6V (300mA)
- 2) 靜態功耗: $\leq 0.5\text{mW(DC)}$ / $\leq 0.6\text{W}(\sim)$
- 3) 適用溫度: 1-55 °C
- 4) 感應範圍: 60cm \pm 15% (對 29.7cm x 29.7cm)
- 5) 進水管管徑: (DN15)G1/2"
- 6) 執行標準: CJ/T 194

材質說明：

- 1) 面板: PP 塑膠

900 橫排留位圖





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

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

本署檔號 : (4) in WSD 3321/19 T/J(1039/2019)
Our ref.
來函檔號 :
Your ref.

電話 :
Tel.
傳真 : 2824 0578
Fax.

29 November 2019

E&I International Limited
8/F., Block B, Chung Mei Centre,
15 Hing Yip Street, Kwun Tong,
Kowloon, Hong Kong

(Attn.: Ms Fanny YAU)

Dear Madam,

**Approval of "BELLINI" Sensor Flush Valve
(General Acceptance No. C20190579F)**

Your letters ref. FY191019A and FY191106A dated 19 October 2019 and 6 November 2019 respectively refer.

Having considered the test report ref. REIA002r1 issued on 4 November 2019 by Ideal Test Consultants Limited, 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: Fujian Gibo Kitchen & Bath Technology Co Ltd

Country of Origin: the Mainland of China

Brand: Bellini

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

Model: NG/249XXX
(where "XXX" denote the mode of cover plate)

Body Markings: 

Expiry Date: 29 September 2024



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 system.

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.

註冊號碼 (Registration No.):

2U 19-0002



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

Certificate of Registration
註冊證書

茲證明


This is to certify that

E&I International Limited

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	:	Bellini
型號 / Model	:	NG/249XXX
種類 / Category	:	2
原產地 / Country or Region Origin	:	China

XX – denotes the mode of cover plate

在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：
Date of Issue: 27 December 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 19-0056



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

Certificate of Registration
註冊證書

茲證明

This is to certify that

E&I International Limited

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	:	Bellini
型號 / Model	:	NG/249XXX
種類 / Category	:	1
原產地 / Country or Region Origin	:	China

XX – denotes the mode of cover plate

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>	:	2	
沖水量 <i>Water Flush Volume</i>	:	2.4	公升/循環 <i>litres/cycle</i>

簽發日期：
Date of Issue: 27 December 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.



IDEAL Test Consultants Ltd.
亞典測試顧問有限公司

Unit 18, 8/F., World-Wide Industrial Ctn,
43 - 47 Shan Mei Street,
Fo Tan, N.T. H.K..
Tel: 3702 1986 Fax: 3702 1987
Email: sunny@idealtest.com.hk

TEST REPORT

REPORT REFERENCE NO. : **REIA002**

TITLE : Testing of Sensor Flush Valve for Urinal

METHOD OF TEST : BS EN 15091: 2013

PERIOD OF TESTS : 16th Aug., 2019 to 30th Sep., 2019

SAMPLE SUBMITTED BY : E & I International Limited
RM 5-7, 8/F., Blk B, Chung Mei Centre,
15 Hing Yip St., Kwun Tong, Kowloon, H.K..

DESCRIPTION OF SAMPLE : 1/2" Sensor urinal flushing valve

BRAND : Bellini

MODEL NO. : NG/249XXX
(the digits "XXX" denote the mode of cover plate)

BODY MARKING : Bellini


MANUFACTURER : FUJIAN GIBO KITCHEN & BATH TECHNOLOGY CO., LTD.

COUNTRY OF ORIGIN : China

SUMMARY OF RESULTS :

(Definition of 'C'- Conformance, 'N'- No requirement & 'NC'- Non-Conformance)

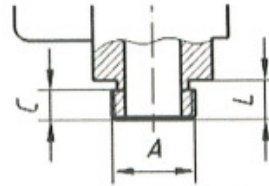
Tested item/s	Remark
1 Dimensions	C
2 Leak tightness test	
2.1 Leaktightness of urinal flushing valve upstream of the obturator	C
2.2 Leaktightness of urinal flushing valve downstream of the obturator with the obturator open	C
3 Hydraulic characteristics	C
4 Pressure resistance characteristics	
4.1 Test of the mechanical behaviour upstream of the obturator	C
5 Mechanical endurance	C
5.1 Measurement of Flow rate & Flush volume after completion of endurance cycles	C
5.2 Leaktightness test after completion of endurance cycles	C

Date : 30 Oct. 2019 Authorized signature : 
Sunny K.S. Wong
(Director)



RESULTS: - (apply only to the sample tested)

1. DIMENSIONS



(BSEN15091: 2013 Cl. 6.5)

ID	Dimension	Unit	Measured	Required	Remark
1	Male thread (A)	inch	G1/2B	G1/2B	C
	Useful thread length (C)	mm	12	≥ 8	C
	Male thread length (L)	mm	12	≥ 12	C
Overall result					C

2. LEAK TIGHTNESS TEST

2.1 Leaktightness of urinal flushing valve upstream of the obturator

(BSEN15091: 2013 Cl.4.6.4)

ID	Variable	Unit	Measured	Required	Remark
1	Static pressure	bar	16	16 ± 0.5	C
	Duration	s	60	60 ± 5	C
	Sign of Leakage	--	No	No	C
Overall result					C

2.2 Leaktightness of urinal flushing valve downstream of the obturator with the obturator open

(BSEN15091: 2013 Cl.4.6.5)

ID	Variable	Unit	Measured	Required	Remark
1	Static pressure	bar	4	4 ± 0.2	C
	Duration	s	60	60 ± 5	C
	Sign of Leakage	--	No	No	C
2	Static pressure	bar	0.2	0.2 ± 0.05	C
	Duration	s	60	60 ± 5	C
	Sign of Leakage	--	No	No	C
Overall result					C



3. HYDRAULIC CHARACTERISTICS

(BS EN 15091: 2013 Cl.6.6)

Sample size	Variable	Unit	Measured	Required		Remark
				DN15	DN20	
DN15	Dynamic pressure	bar	1	1 +0.1	1 +0.1	C
	Flow rate	l / s.	0.19	≥ 0.15	≥ 0.5	C
				≥ 0.3		
Volume per flush	litre	1.5	≥ 0.75 & ≤ 1.5	≥ 3 & ≤ 6	C	
			≥ 2 & ≤ 4			
Overall result						C

4. PRESSURE RESISTANCE CHARACTERISTIC

4.1 Test of the mechanical behaviour upstream of the obturator

(BS EN15091: 2013 Cl.4.7)

ID	Variable	Unit	Measured	Required	Remark
High pressure	Static pressure	bar	25	25±0.5	C
	Duration	s	60	60 ±5	C
	Sign of Leakage	--	No	No	C
Overall result					C

5. MECHANICAL ENDURANCE

(BS EN 15091: 2013 Cl.6.8 & WSD requirement)

ID	Variable	Unit	Measured	Required	Remark
1	Cold water temperature	° C	24	< 25	C
	Dynamic flow pressure	bar	2.5	2.5 ±0.2	C
	Total cycles completed	cycles	70000	≥ 70000	C
	Total cycles completed (WSD)	cycles	200000	≥ 200000	C
Overall result					C



5.1 Measurement of Flow rate & Flush volume after completion of endurance cycles

(BS EN 15091:2013 Cl.6.8.4)

Sample size	Variable	Unit	Measured	Required		Remark
				DN15	DN20	
DN15	Dynamic pressure	bar	1.0	1 +0.1	1 +0.1	C
	Flow rate	l / s.	0.18	≥0.15	≥0.5	C
				≥0.3		
	Volume per flush before endurance test (V1)	litre	1.5	≥0.75 & ≤1.5	≥3 & ≤6	C
	Volume per flush after endurance (V2)			≥2 & ≤4		
Calculate the flush volume which were tested before & after endurance test $\frac{V2 - V1}{V1}$	%	6.7	≤25	≤25	C	
Overall result						C

5.2 Leaktightness test after completion of endurance cycles

(BSEN15091: 2013 Cl.6.8.4)

ID	Variable	Unit	Measured	Required	Remark
1	Static pressure	bar	16	16 ±0.5	C
	Duration	s	60	60 ±5	C
	Sign of Leakage	--	No	No	C
Overall result					C

(BSEN15091: 2013 Cl.6.8.4)

ID	Variable	Unit	Measured	Required	Remark
1	Static pressure	bar	4	4 ±0.2	C
	Duration	s	60	60 ±5	C
	Sign of Leakage	--	No	No	C
2	Static pressure	bar	0.2	0.2 ±0.05	C
	Duration	s	60	60 ±5	C
	Sign of Leakage	--	No	No	C
Overall result					C

Remark : the solenoid valve body is found made of plastic which is consider suitable for flush water / sea water application

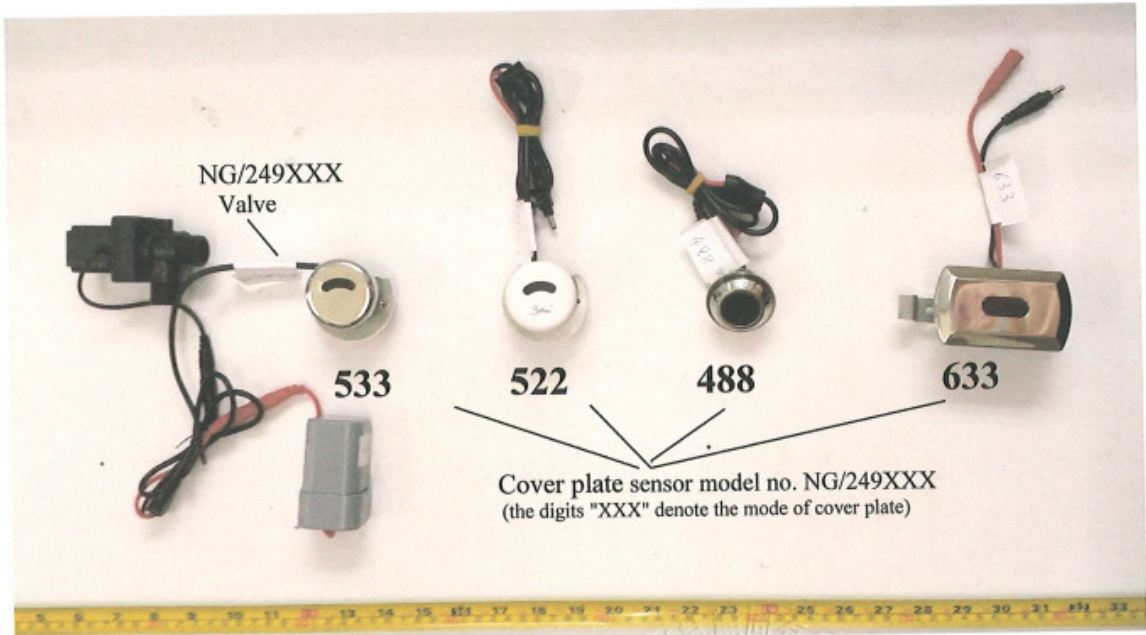


Figure 1-Sample (Valve with different sensor cover plate)

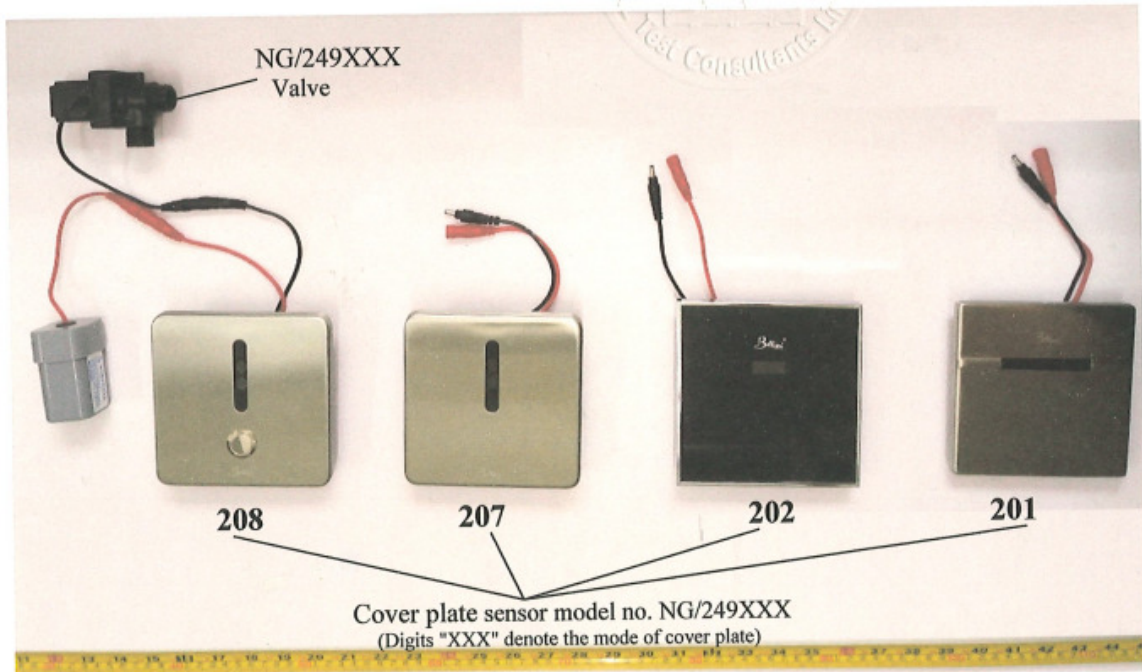


Figure 2-Sample (Valve with different sensor cover plate)



Marking (533)



Marking (522)



Marking (488)



Marking (633)



Marking (208)



Marking (207)



Marking (202)



Marking (201)

Figure 3 – Body marking

- End of report -



IDEAL Test Consultants Ltd.
亞典測試顧問有限公司

Unit 18, 8/F., World-Wide Industrial Ctn,
43 - 47 Shan Mei Street,
Fo Tan, N.T. H.K..
Tel: 3702 1986 **Fax:** 3702 1987
Email: sunny@idealtest.com.hk

TEST REPORT

REPORT REFERENCE NO. : **REIA002W**

TITLE : Testing of Sensor Flush Valve for Urinal

METHOD OF TEST : The Voluntary Water Efficiency Labelling Scheme on Urinal Equipment
(December 2014)

PERIOD OF TESTS : 16th Aug., 2019 to 25th Sep., 2019

SAMPLE SUBMITTED BY : E & I International Limited
RM 5-7, 8/F., Blk B, Chung Mei Centre,
15 Hing Yip St., Kwun Tong, Kowloon, H.K..

DESCRIPTION OF SAMPLE : 1/2" Sensor urinal flushing valve

BRAND : Bellini

MODEL NO. : NG/249XXX
(the digits "XXX" denote the mode of cover plate)

BODY MARKING : Bellini

MANUFACTURER : FUJIAN GIBO KITCHEN & BATH TECHNOLOGY CO., LTD.

COUNTRY OF ORIGIN : China

SUMMARY OF RESULTS :

(Definition of 'C'- Conformance, 'N'- No requirement & 'NC'- Non-Conformance)

Tested item/s	Remark
1. Water Flush Volume per Cycle	C
2. Endurance of the urinal flush valve	C
3. After endurance Water Flush Volume per Cycle	C

Date : 3 Oct., 2019

Authorized signature : _____


Sunny K.S. Wong
(Director)



Report reference no. REIA002W

RESULTS: - (apply only to the sample tested)

1. Water Flush Volume per Cycle

The Voluntary WELS on Urinal , Dec.2014 , Section B4

ID	Description	Test Pressure (Bar)	Water flush Volume per cycle (Litres / cycle)	Water Efficiency Grade	Remark
Category 1	Urinal Equipment in normal pressure application	1.75	2.4	Grade 2 ($1.5 < f \leq 2.5$)	C
Category 2	Urinal Equipment in low pressure application	0.4	1.1	Grade 1 ($f \leq 1.5$)	C
Overall result					C

2. Endurance of the urinal flush valve

The Voluntary WELS on Urinal , Dec.2014 , Section B3

At a test pressure of 1.75bar (i.e normal pressure application) Inlet water pressure =1.75 bar

Accumulated number of flush cycles completed	Water leakage test		Remark
	Type of test	Sign of leakage	
1	Long term test	No leakage	C
2	Short term test	No leakage	C
5	Short term test	No leakage	C
10	Short term test	No leakage	C
50	Short term test	No leakage	C
100	Short term test	No leakage	C
500	Short term test	No leakage	C
1000	Short term test	No leakage	C
10000	Short term test	No leakage	C
20000	Short term test	No leakage	C
30000	Short term test	No leakage	C
40000	Short term test	No leakage	C
50000	Short term test	No leakage	C
60000	Short term test	No leakage	C
70000	Short term test	No leakage	C
80000	Short term test	No leakage	C
90000	Short term test	No leakage	C
100000	Short term test	No leakage	C
110000	Short term test	No leakage	C
120000	Short term test	No leakage	C
130000	Short term test	No leakage	C
140000	Short term test	No leakage	C
150000	Short term test	No leakage	C
160000	Short term test	No leakage	C
170000	Short term test	No leakage	C
180000	Short term test	No leakage	C
190000	Short term test	No leakage	C
200000	Long term test	No leakage	C
There shall be no more than two instances of leakage			C

Note: all parts of the valve sample showed no sign of failure, damage or permanent distortion.
Remark : The valve is made of plastic and rubber which are suitable for sea water application.



3. After endurance Water Flush Volume per Cycle

The Voluntary WELS on Urinal, Dec.2014, Section B4 & B5

ID	Description	Test Pressure (Bar)	Water flush Volume per cycle (Litres / cycle)	Water Efficiency Grade	Remark
Category 1	Urinal Equipment in normal pressure application	1.75	2.5	Grade 2 ($1.5 < f \leq 2.5$)	C
Category 2	Urinal Equipment in low pressure application	0.4	1.2	Grade 1 ($f \leq 1.5$)	C
Overall result					C

ID	Description	Test Pressure (Bar)	Water flush Volume per cycle (Litres / cycle)	Water Efficiency Grade	Remark
Category 1	Initial nominal flush volume	1.75	2.4	Grade 2 ($1.5 < f \leq 2.5$)	C
	Final nominal flush volume		2.5		
Category 2	Initial nominal flush volume	0.4	1.1	Grade 1 ($f \leq 1.5$)	C
	Final nominal flush volume		1.2		
Overall result					C

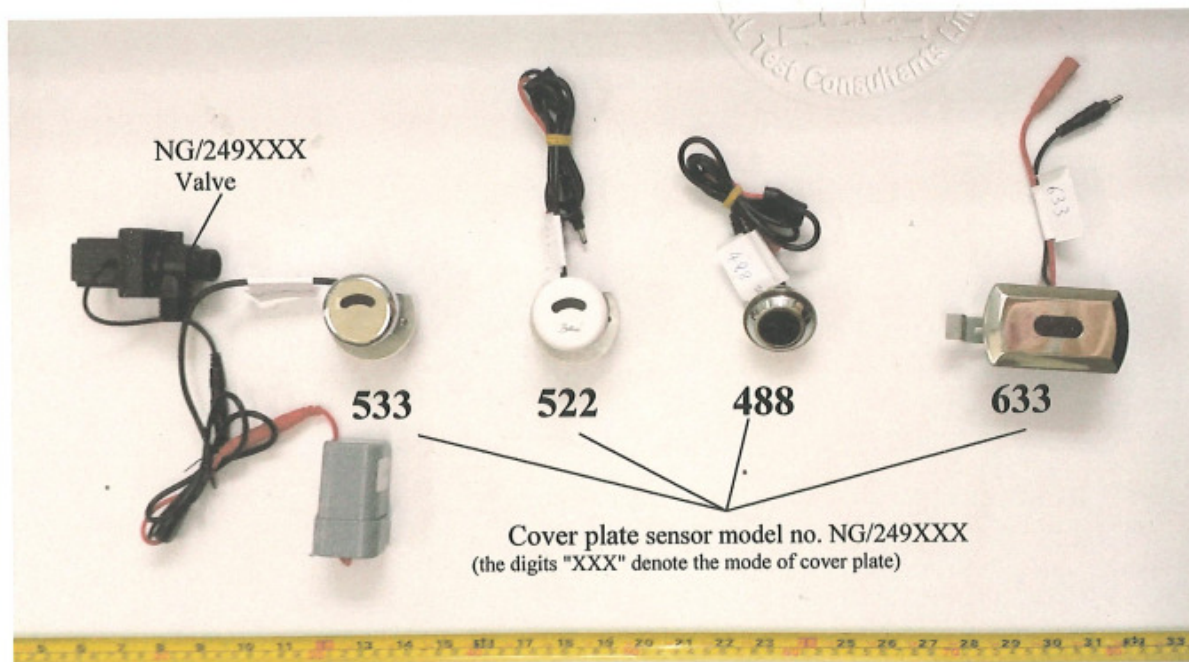


Figure 1-Sample (Valve with different sensor cover plate)

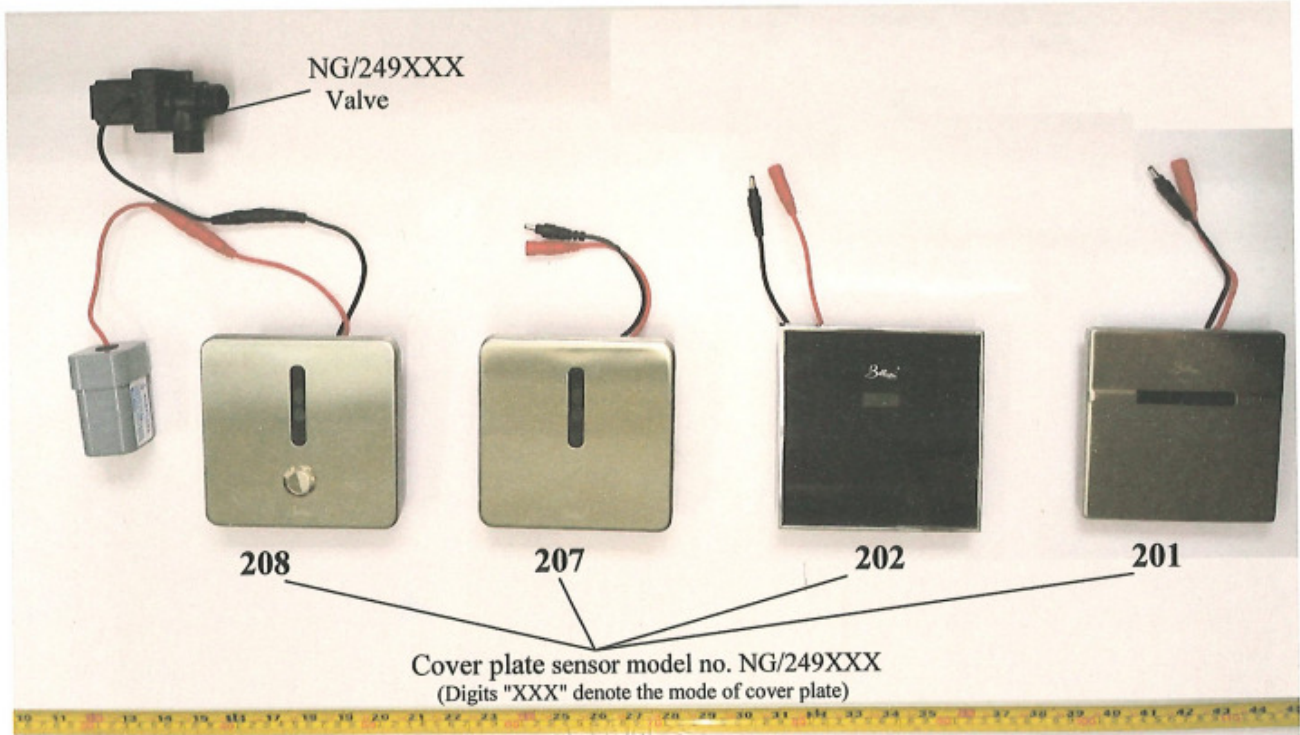


Figure 2-Sample (Valve with different sensor cover plate)

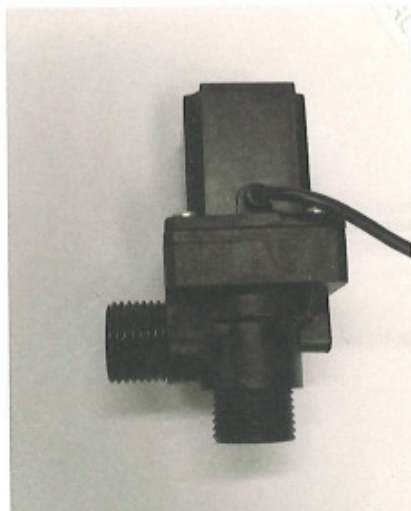


Figure 3- Side view of the Sample



Figure 4 – Bottom views of water closets



Report reference no. REIA002W



Marking (533)



Marking (522)



Marking (488)



Marking (633)



Marking (208)



Marking (207)



Marking (202)



Marking (201)

Figure 5 – Body marking

- End of report -