

# TOTO

## 感应式大便器冲洗阀（埋入式）

### 定量型

TREF75U\* <埋入交流电型>

TREF75K\* <埋入干电池型>

TREF45L\* <埋入交流电型>

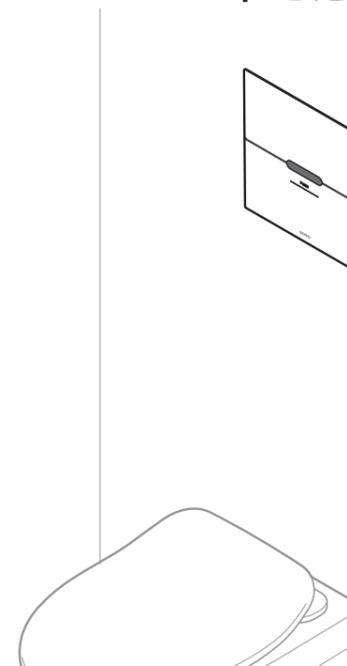
### 非定量型

TREF85U\* <埋入交流电型>

TREF85K\* <埋入干电池型>

TREF65U\* <埋入交流电型>

TREF65K\* <埋入干电池型>



- 承蒙购买 TOTO 产品，不胜感激。
- 请仔细阅读本说明书记载的各项内容，以便能正确使用。
- 本安装说明书阅后请妥善保管，以备日后查用。
- 随着产品式样的不断更新，实物存在与图示不符的情况，但基本安装、使用原理相同。产品最终式样以实物为准。

1. 安全上的注意..... 1~2	序 言
2. 确认各部件及名称 ..... 3	
3. 规格..... 4	
4. 安装前..... 4	安 装 方 法
5. 完成图 ..... 5	
6. 安装步骤（埋入型的安装） ..... 6~15	
7. 试运转 ..... 16~17	
8. 生产厂家与销售商 ..... 18	

# 1 安全上的注意 (安全起见, 务必遵守)

安装前, 请仔细阅读“安全上的注意”, 并根据其内容正确安装。

● 为了使您能安全正确地安装该产品, 防止危害您或他人的安全及财产损失, 本说明书记载了各种标志。

● 必须遵守的内容, 以如下标志区分说明

这些标志及其意思说明如下。

标志	意思
 警告	无视此标志而误操作时, 有可能造成人员重伤或死亡。
 注意	无视此标志而误操作时, 有可能造成人身伤害或财产损失。

	此图表示不可行「禁止」之意
	请勿将产品装于易接触到水、结露或湿气较重的地方
	禁止拆解
	必须“强制”实行的内容

 警告		
	不要在电源插头或功能部分上泼水可能导致火灾或触电。	
	请勿将产品装于易接触到水、结露或湿气较重的地方	
	勿用湿手拔插电源线 (否则, 可能会导致触电。)	
	将电源线插入端子台时, 务必插入到底部 (否则, 可能会导致火灾或触电。) ※在这项作业之前, 请务必确认已关闭电源断路器。	

 注意		
	请勿撞击产品。 (否则, 可能会造成故障、漏水)	
	请勿将产品安装在容易发生冻结的场所。 (否则, 可能会造成故障、漏水)	

# 8 Manufacturer and Vendor

## TOTO Certificate

Standard followed : See the label on the packing box  
 Product type number : See the label on the packing box  
 Product name : See the label on the packing box  
 Production date : See the label on the packing box

Assembly factory TOTO (Guangzhou) Co., Ltd  
 Factory address No. 715 Xing Nan Road, Nan Cun Town, Panyu, Guangzhou

TOTO (China) Co., Ltd.

National after-sale service telephone:

800-820-9787 (landline telephone)

400-820-9787 (mobile phone users)



Scan the QR code  
 Service appointment,  
 convenient and fast

Vendor: TOTO (China) Co., Ltd.

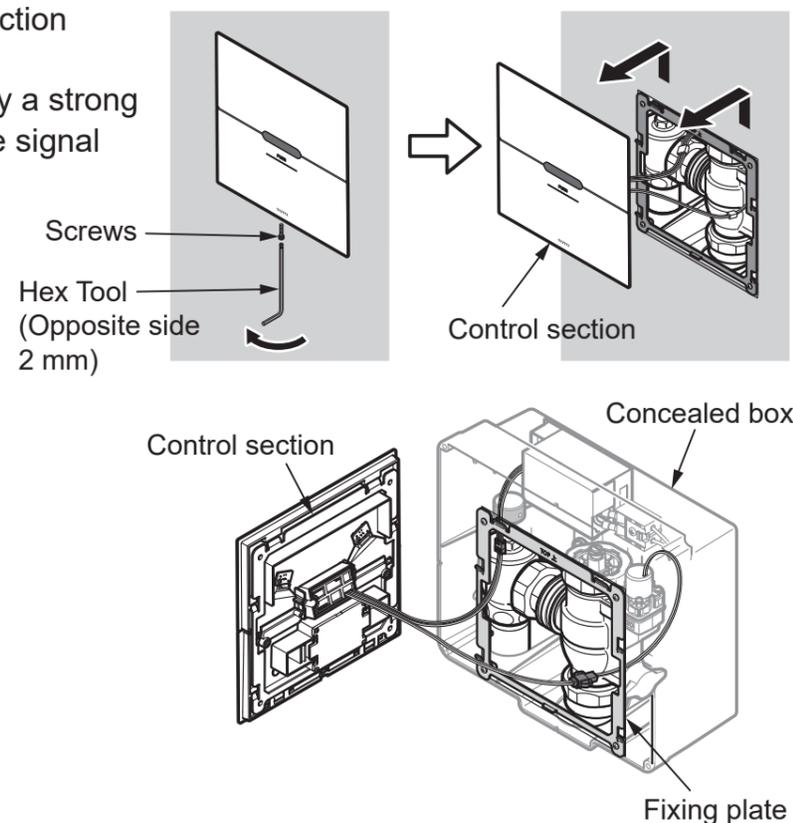
Address: Room 1915, Northern Building, Beijing Jiali Center, No. 1,  
 Guanghua Road, Chaoyang District, Beijing.

Website: www.toto.com.cn

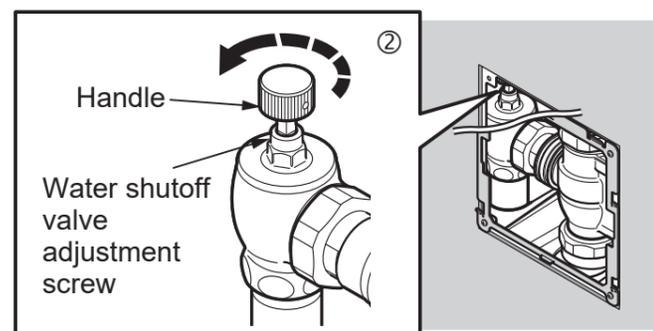
### 3 Confirmation of Water Level

① Remove the control section from the fixing plate.

\*Be careful not to apply a strong force and damage the signal lines.



② Use the attached handle to fully close the water shutoff valve once and adjust it while gradually opening it.



③ Check the water flow to the appropriate level while checking the toilet bowl flow.

Depending on installation conditions, such as on-site water pressure, a pulsating sound may be generated because of the characteristics of the constant flow valve; this is not abnormal. If the noise is bothersome, the noise may be reduced by turning the water shutoff valve off.

### 1 安全上的注意 (安全起见, 务必遵守)

⚠ 注意		
禁止	请勿安装阻碍水流正常通过的节流类装置。 (否则, 可能会影响冲水的效果, 并造成漏水)	节流类装置
必须执行	在可能混入空气的进水配管上必须安装排气阀, 防止空气残留在配管内 (新建、改建工程后或自来水停水恢复后, 如果在混入大量空气和水的情况下向产品供水, 可能会导致产品破损或故障, 造成人身伤害或财产损失)	
禁止拆解	非专业维修人员请勿擅自拆解、维修。 (否则, 可能会造成故障、漏水)	
必须执行	取出活塞阀清洗前, 请务必先关闭进水角阀或进水总开关 (请参考维护保养页面) (否则水可能会喷出, 污损家具、造成财产损失)	
必须执行	工作时要戴上手套。 (存在意外伤害的风险)	戴手套

#### ⚠ 注意

- 在可能结冰的场所使用时, 要切实做好防冻措施。由于结冰, 零件破损, 有可能导致漏水, 造成财产损失。因结冰而造成的破损即使在保修期内也是有偿修理。请不要让产品的环境温度低于 1℃。

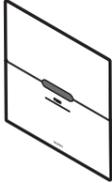
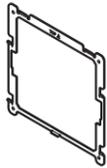
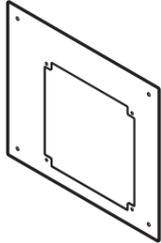
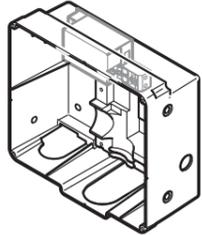
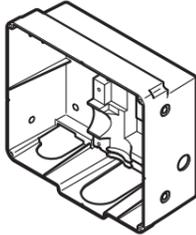
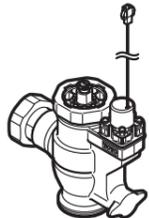
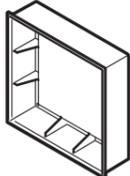
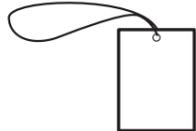
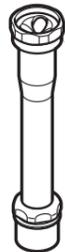
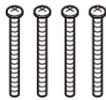
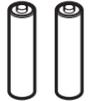
#### 防冻措施

在可能结冰的场所使用时, 要切实做好防冻措施。

- 产品结冰的话零件损坏, 成为漏水的原因。
- 因结冰造成的零件破损即使在保修期也是有偿修理。
- 施工完了后或长时间不使用时, 要有预防突然降温的准备, 要对产品进行结冰预防。
- 因为有结冰的危险, 请不要让产品周围的温度在 1℃ 以下。

## 2 确认各部件及名称 (请确认下述部件是否齐备)

本体部明细

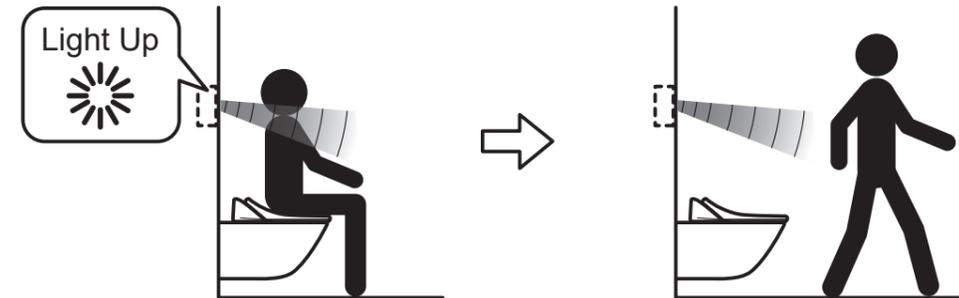
				
含罩盖的控制面板 (共通)	固定板 (共通)	安装板 (共通)	外壳 TREF75U* TREF85U* TREF45L* TREF65U*	外壳 TREF75K* TREF85K* TREF65K*
				
进水角阀 TREF85U* TREF85K* TREF65U* TREF6KU*	进水角阀 TREF75U* TREF75K* TREF45L*	自动冲洗阀本体 (共通)	保护盖 (共通)	注意卡 (共通)
※外壳上有一个旋钮。				
				
进水管 (共通)	固定架 (共通)	电池盒 TREF75K* TREF85K* TREF65K*	带逆流阀的 排水管 (共通)	内六角扳手 (对边 2mm) (共通)
				
密封圈 TREF75U* TREF75K* TREF45L*				固定板用螺钉 (共通)
				其它  安装 / 使用说明书 (共通)
自攻螺钉 TREF75U* TREF85U* TREF45L* TREF65U*	电源线固定夹 TREF75U* TREF85U* TREF45L* TREF65U*	碱性干电池 TREF75K* TREF85K* TREF65K*	自攻螺钉 TREF75K* TREF85K* TREF65K*	

※由于型号不同, 图和实物会略有差异

## 7 Trial Run

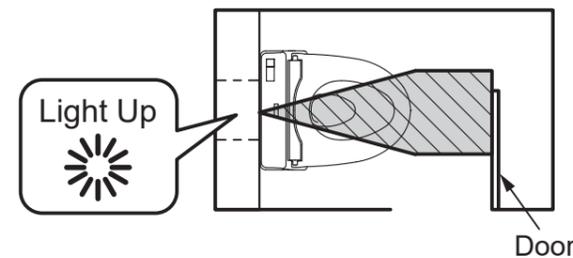
### 1 Sensor Trial Run

Sit in front of the sensor, if the user is sensed, the sensor indicator light is on, and the user gets up and leaves after it lights up for more than 6 seconds; make sure the sensor indicator lights is off and the flushing water is automatically flushed out after about 3 seconds.



If an obstacle is sensed for more than 10 minutes, wait for the distance automatically adjusted.

If this still senses the wall of the toilet seat or the toilet bowl, the sensing distance must be reset.



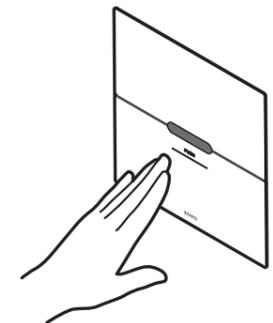
\*If the sensor detects a wall or door, it will not be able to accurately detect the human body and will not be able to determine large or small washing or perform automatic washing.

### 2 Operation buttons Trial Run

Confirm that water flushes when the button on the control section is pressed. Note that once the unit has been cleaned, it cannot be re-cleaned for approximately 11 seconds.

#### Cleaning with button

Check item: Press the button, and the valve discharges water.

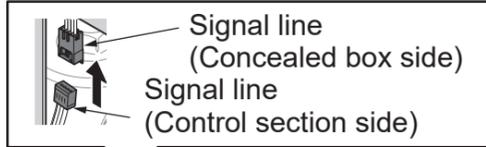


## 8-2 Connection of signal lines and installation of control section

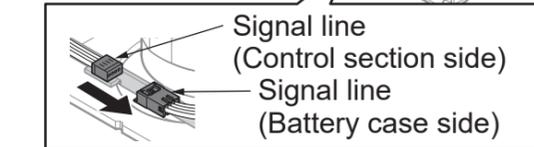
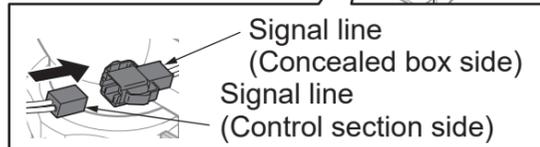
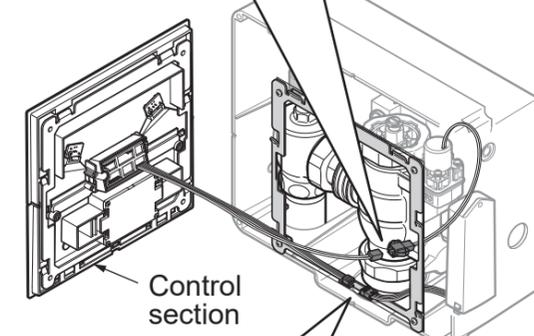
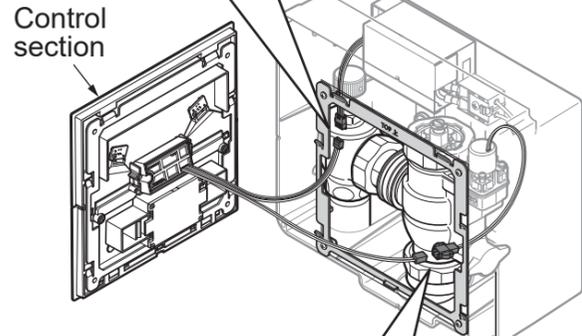
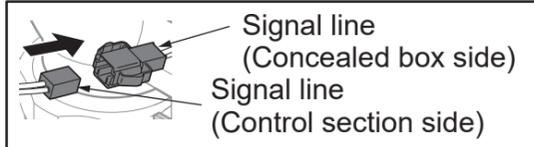
④ Connect concealed box's board signal wires to the signal wires coming from the control section. Next, connect concealed box's board signal line to the solenoid valve signal line coming from the valve body.

\* The Battery Box should be stored inside the Concealed box.

### AC type



### Dry battery type

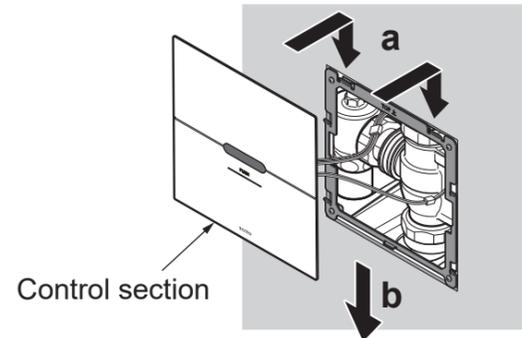


### Caution

After connecting the power supply, 10 minutes is the wall study time. Please wait during this time.

⑤ Attach the control section to the fixing plate.

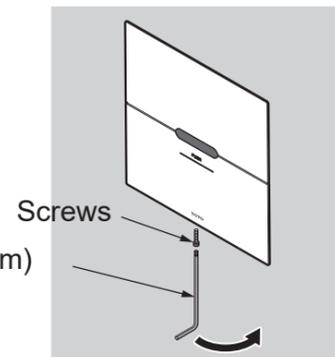
- Place the control section on the 6 claws of the mounting board.
- Push the control panel down along the wall and attach it firmly to the fixing plate.



⑥ Finally, tighten the hexagonal mounting screws.

\* Check that there is no rattling in the Control section.

Hex Tool  
(Opposite side 2 mm)

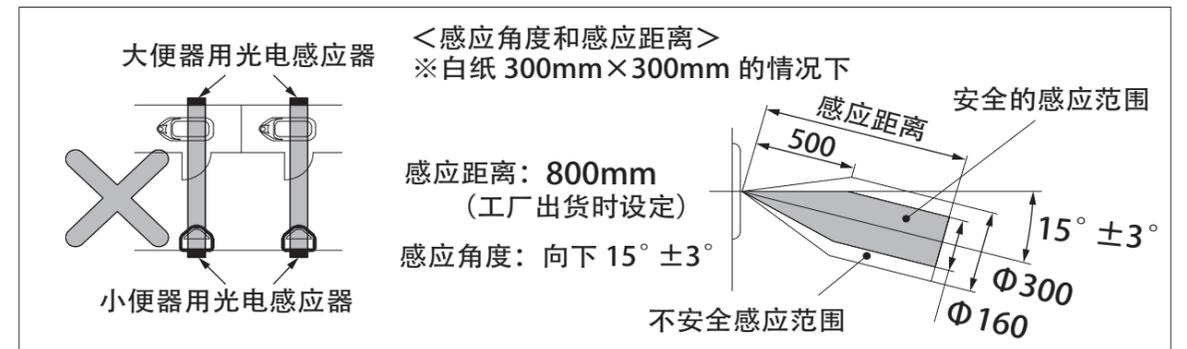


## 3 规格

类型	非定量		定量		
	TREF85*	TREF65*	TREF75U*	TREF75K*	TREF45L*
马桶标准冲洗水量	8.0L	6.0L	5.0L (*120秒以上) 3.5L (*6~120秒) *人体感知时间 ※91L/min时, 设定的出厂条件不能 超过清洗水量的上限		4.8L
进水 水压	最低必要水压 (流动时)	FP:0.1MPa			
	最高必要水压 (静止时)	SP:0.75MPa		SP:0.75MPa ※流动压力0.5MPa以上时, 需要调节止水阀	
电源电压	AC:220V DC:2.1V-3V 碱性5号干电池2节	AC:220V DC:2.1V-3V 碱性5号干电池2节	AC:220V	DC:2.1V-3V 碱性5号干电池2节	AC:220V
	※连接电源后, 障碍物学习10分钟。				
导线长度	150mm				
人体感应距离	800mm				
人体感应时间	连续 6 秒时感应				
使用水温范围	1 ~ 40°C				
使用水	自来水				
进水管径	R1				

## 4 安装前

- 请务必保证使用场所的宽度在 800mm 以上。  
(否则产品可能因感知对面墙壁而不动作。)
- 请注意, 切勿损伤感应器的表面。
- 感应器的感应角度及感应距离如下图所示。  
另外, 如果该产品与本公司的 U S 系列产品及其它光电感应产品在同一直线上面对面安装的话, 可能会产生误动作 (如下图)。请错开其安装位置。



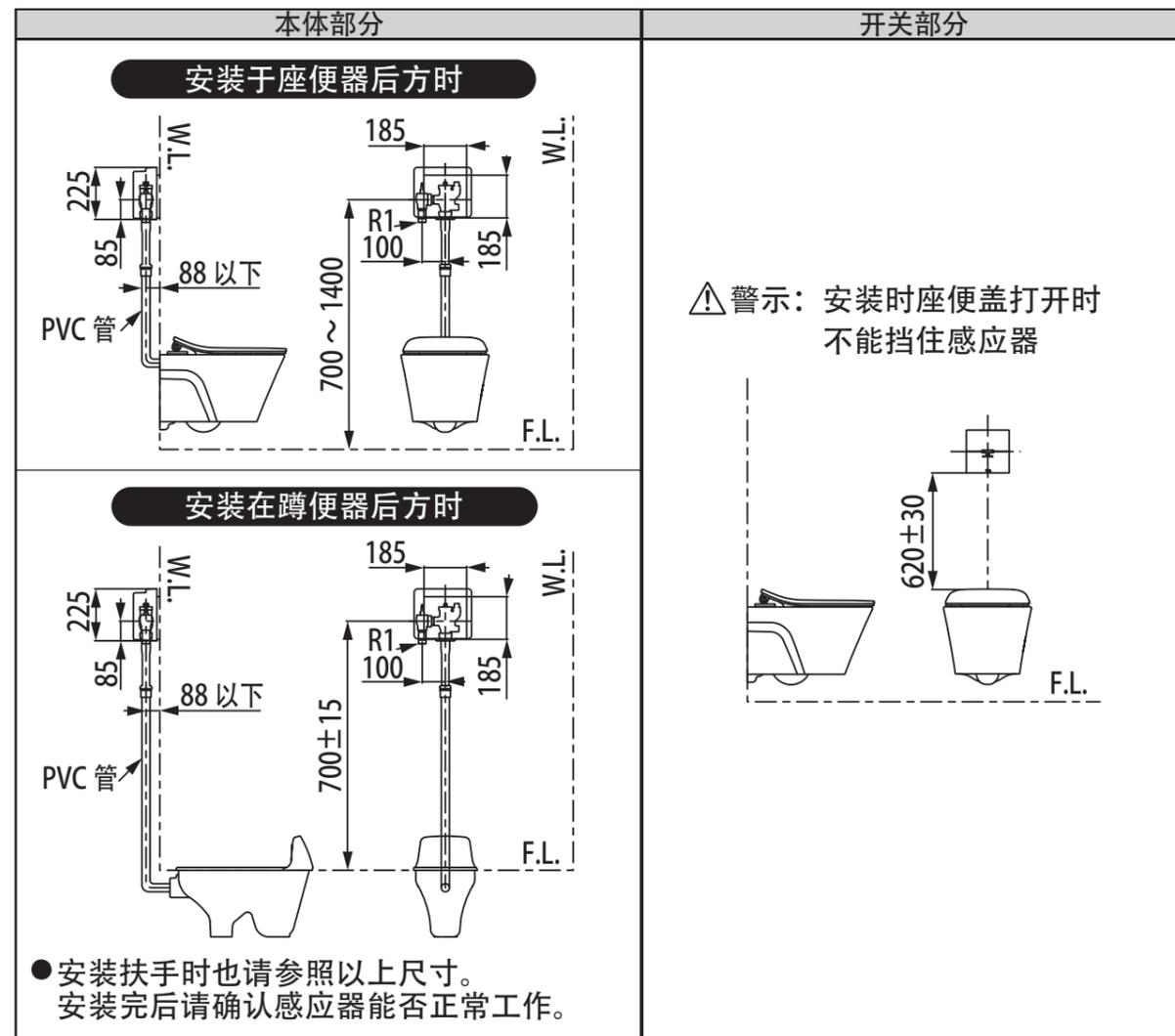
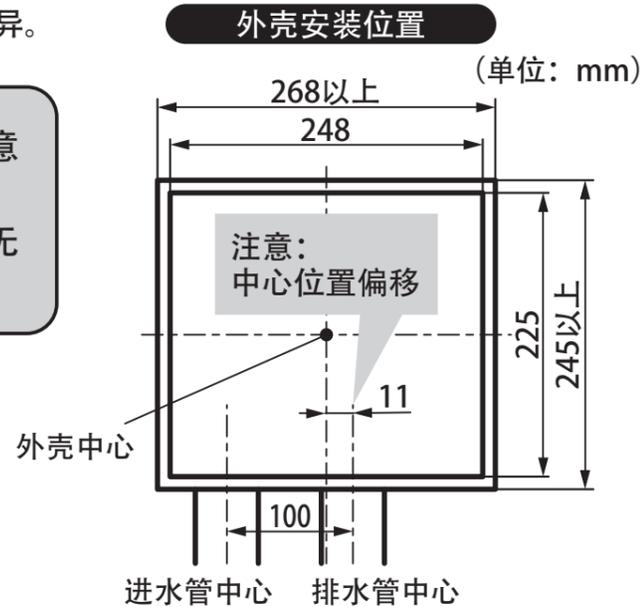
- 水路管道施工与电气施工请在充分协调, 考虑之后再进行。
- 自动冲洗阀与信号装置间的信号线请务必使用附属部件。
- 因为产品在包装前进行过通水检查, 故内部可能会有残留水滴, 此绝非产品问题。

# 5 完成图

※由于型号不同，图与实物形状会略有差异。

## 注意

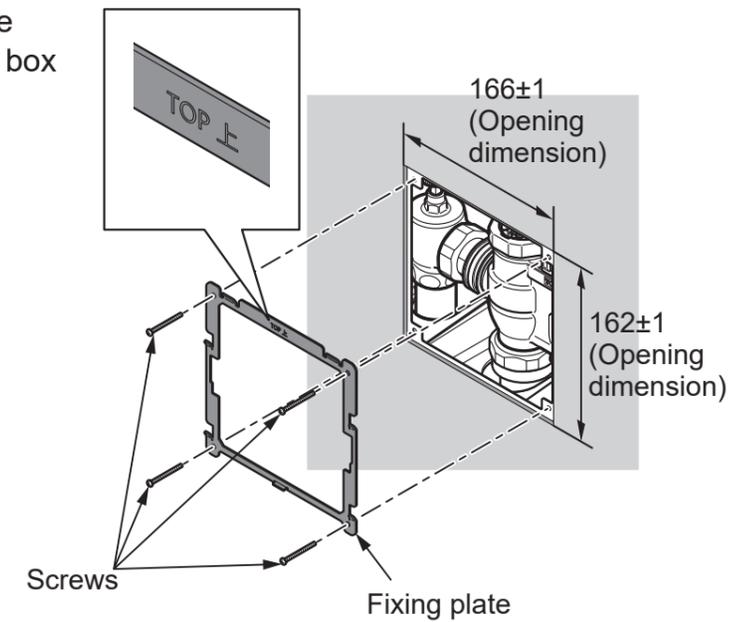
考虑将操作面板放置在中央，需注意排水中心和外壳中心偏移了11mm  
请按右述视图进行安装，否则性能无法保证。



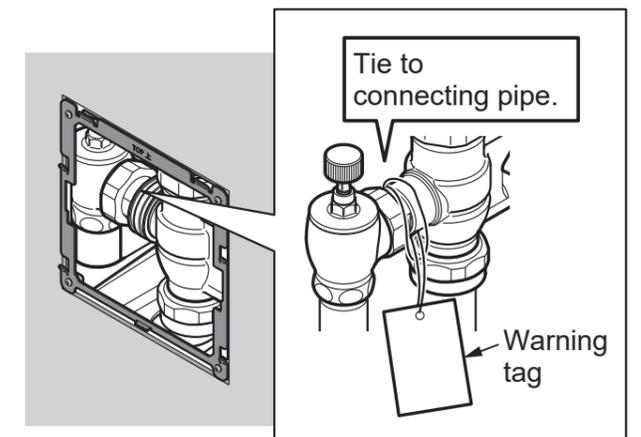
# 8-1 Connection of signal lines and installation of control section

① Secure the fixing plate for the control section to concealed box with screws (4pcs).

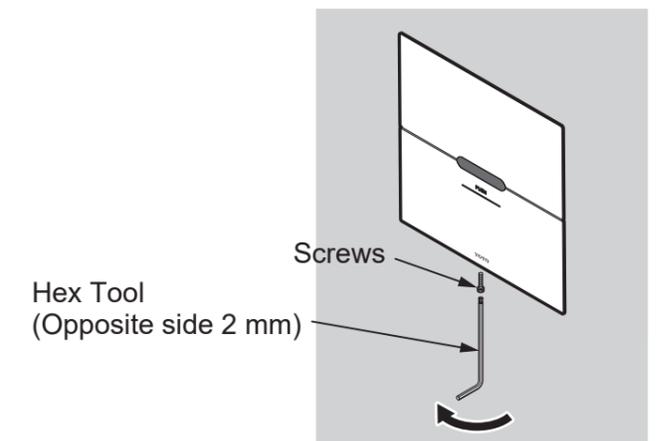
\*Check for level after fixing.



② Tie the warning tag in a visible position.  
(Water shutoff valve or connecting pipe)

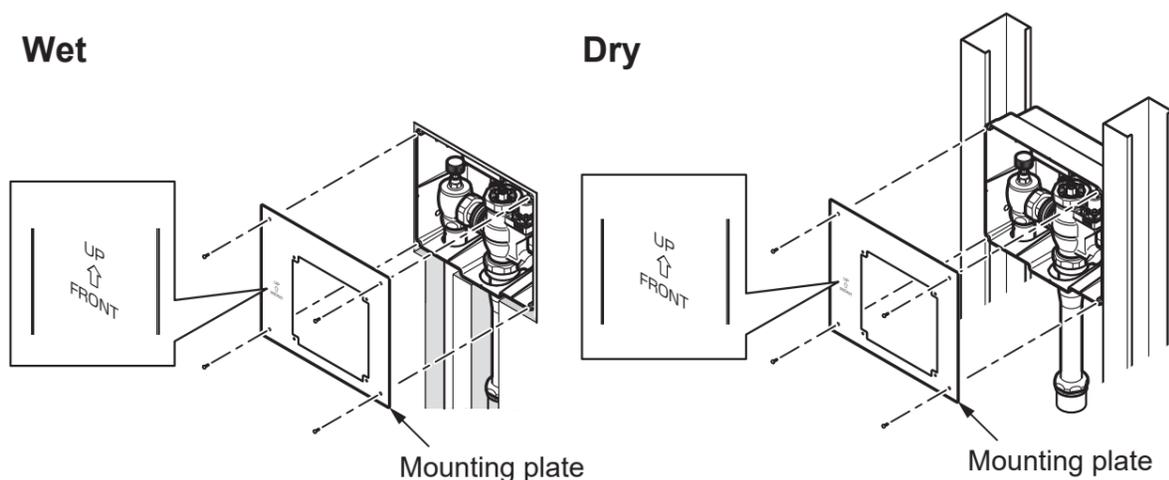


③ Remove the hexagonal screws fastened to the control section.



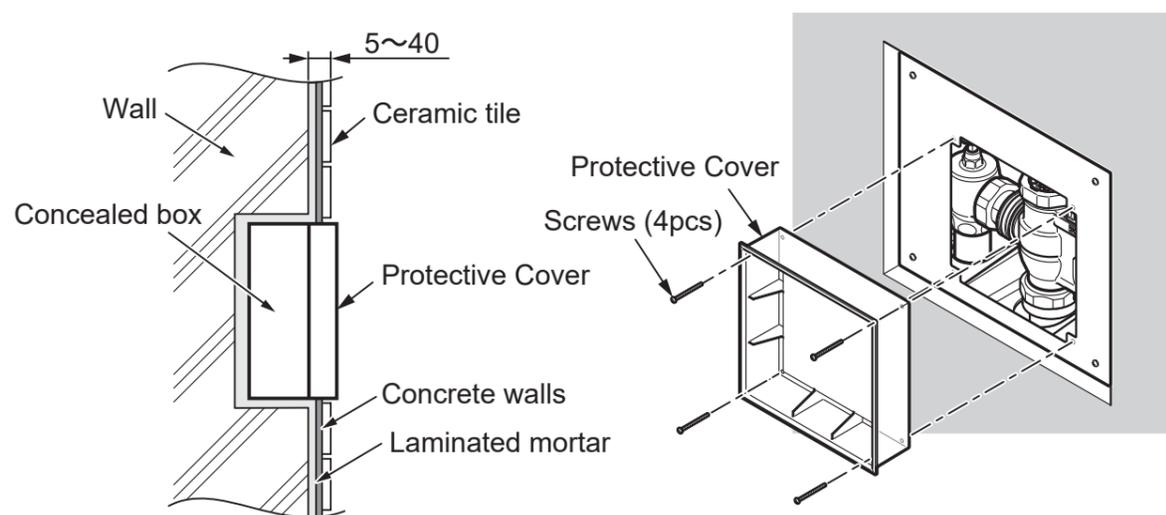
## 6 Assembly of mounting plate

① Attach the mounting plate to concealed box with the supplied screws (4pcs).



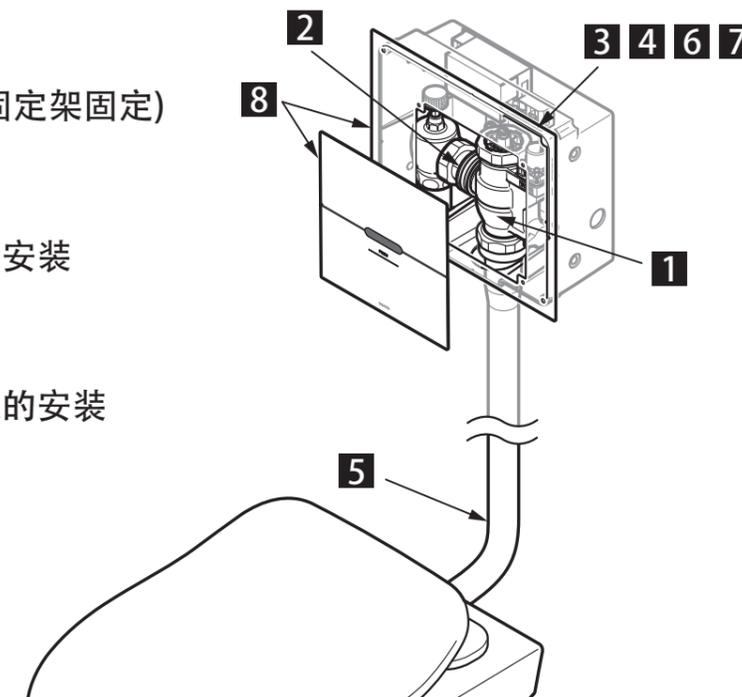
## 7 Backfill the subgrade (only for wet operation method)

- ① Secure the protective cover (accessory) to concealed box with four screws (4pcs).
- ② Backfill around concealed box with mortar.
- ③ Put mortar on the wall and place the ceramic tiles.
- ④ Uninstall the screws and remove the protective box.



## 6 安装步骤 (埋入型的安装)

- 1 安装自动冲洗阀本体组件
- 2 将组件组装到外壳上(用固定架固定)
- 3 安装外壳
- 4 电源线的连接
- 5 坐便器连接部和排水管的安装
- 6 固定板的安装
- 7 墙面填充(湿式施工)
- 8 信号线的连接及操作面板的安装



## 1 安装自动冲洗阀本体组件

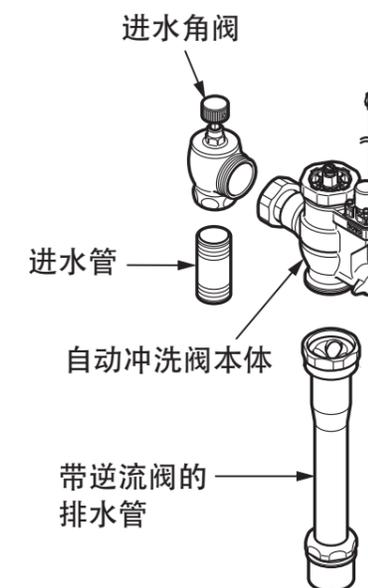
安装自动冲洗阀本体组件前，必须将进水管内的垃圾、砂石等冲洗干净。

### 注意

自带的进水管为SUS管，为了防止异种金属接触导致的腐蚀，与铜管以外的部分连接时，请务必使用绝缘接头。

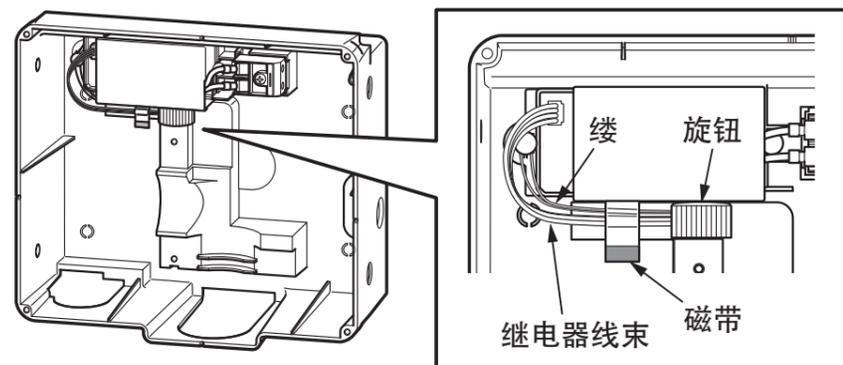
以下步骤全部在壳外部进行。

- ① 将进水管连接到进水角阀上，连接螺纹处要缠上生胶带。
- ② 将带逆流阀的排水管连接到自动冲洗阀本体组件。
- ③ 连接自动冲洗阀本体和进水角阀。



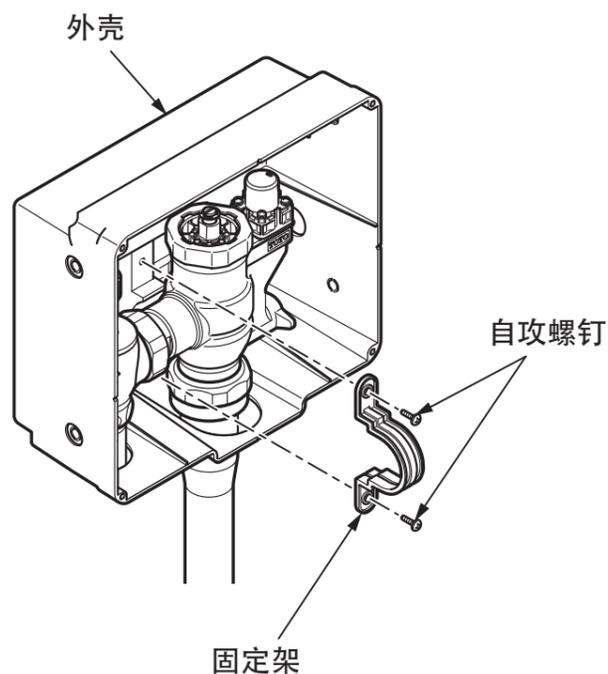
## 2 将组件组装到外壳上(用固定架固定)

①剥去固定继电器线束的胶带。



② **6** - **1** 已组装自动冲洗阀本体、进水角阀及带逆流阀的排水管顺着外壳形状放入。

③使用固定架和自攻螺钉固定自动冲洗阀本体。

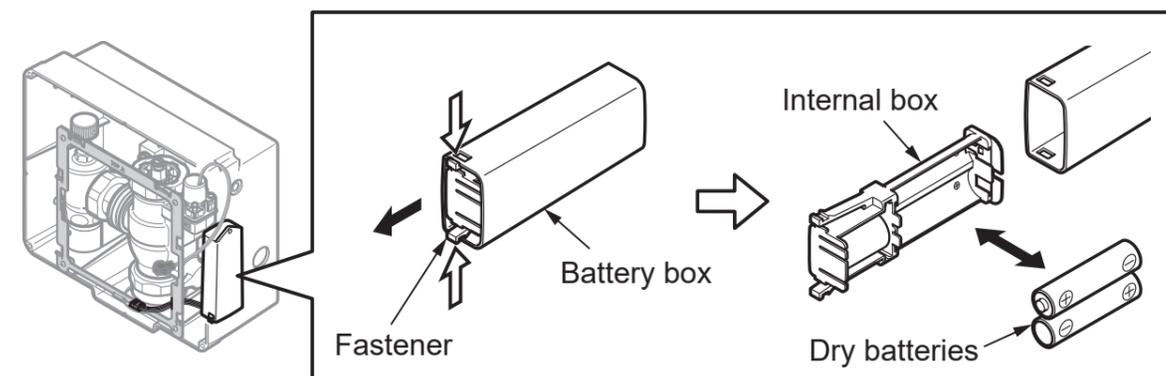


## 4-3 Connection of power wires

### Dry battery type

#### [Dry battery installation method]

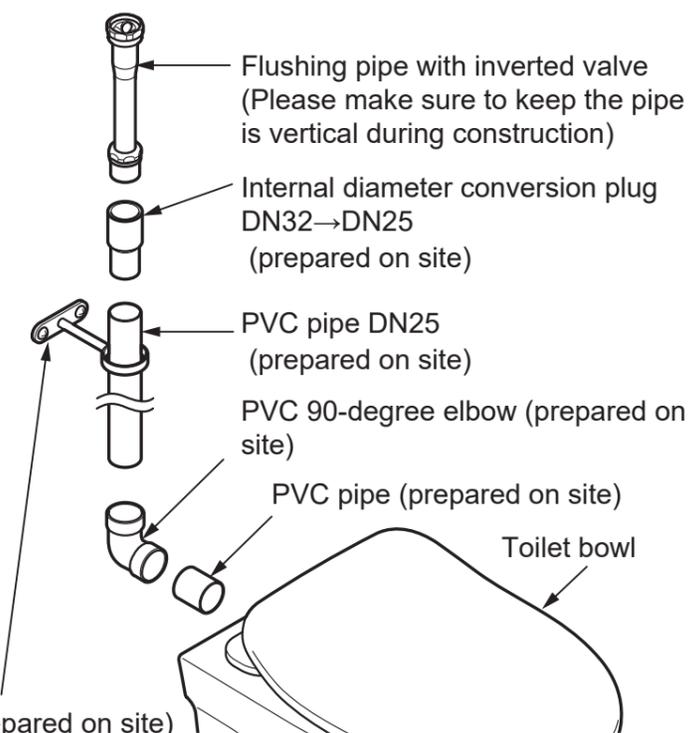
- ① Take out the internal box by pushing inward the fastener at the lower part of the battery box.
- ② After exchanging the dry batteries (two No. 5 batteries), install the battery box back to the original position.
- ③ The Battery Box should be stored inside the Concealed box.



## 5 Installation of toilet seat connection and flush pipe

### Caution

The outer diameter of the pipe to be connected to the toilet bowl should be equivalent to  $\phi 32$  mm. The decrease in water pressure caused by the number of appliance settings, the length of piping, and the simultaneous use of multiple appliances may cause poor cleaning, so please ensure appropriate piping designs. In addition to PVC pipes, lead pipes and steel pipes can also be used. Please make sure no water leakage after construction; Please try not to change the original design of the product during construction.



Pipe holder (Prepared on site)  
\*Secure the cleaning pipe with pipe holders.

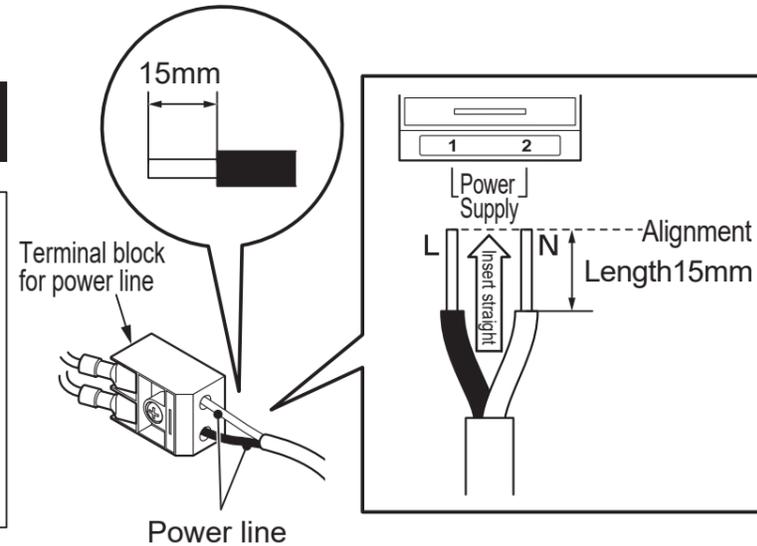
## 4-2 Connection of power wires

### Important Precautions for connection to the power terminal block

- Strip 15 mm of the sheath of the power wire (prepared on site) and check that the core wire is securely inserted into the terminal hole of the terminal block.

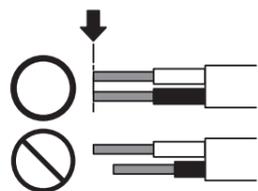
### Full Insertion

After connection, visually check that the power cable core is correctly inserted into the power terminal block as shown at right.

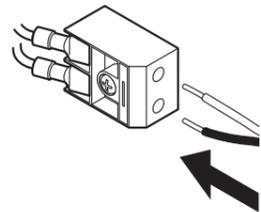


- Make the core wires of the power cable the same length (the length of the exposed power terminal block should also be the same).

### To the end face

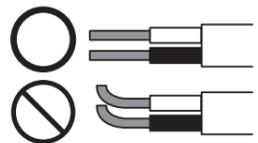


- Insert the wire core straight into the power terminal block.

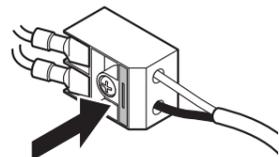


- Do not bend the core of the power cable. Otherwise, the power cable may not be fully inserted into the power terminal block.

### Do not bend the core wire



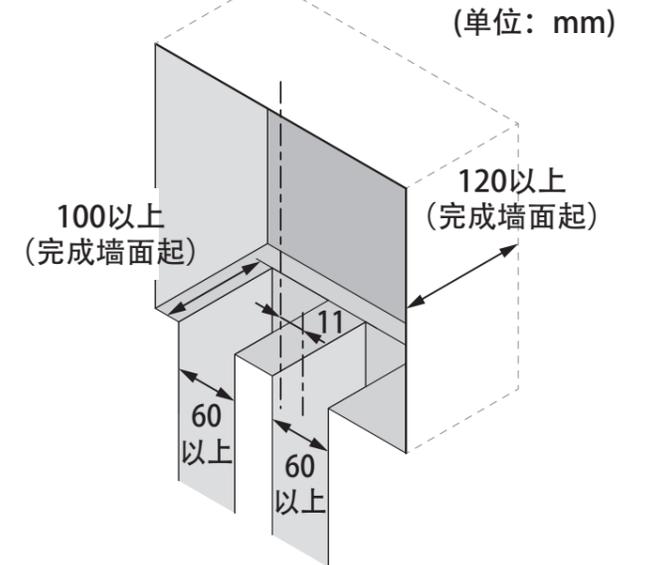
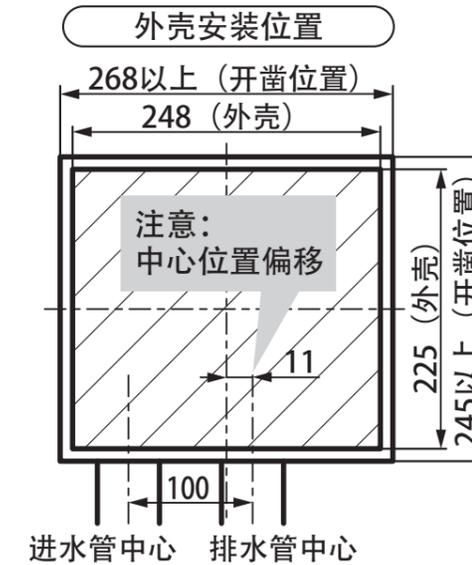
- To remove the power cable, use a flat-blade screwdriver to press down hard on this part and pull out the power cable.



## 3-1 安装外壳

### 湿式施工法

- ①根据下图在毛坯墙上，画出安装位置的中心线及开凿位置。
- ②根据画出的尺寸来开凿毛坯墙。



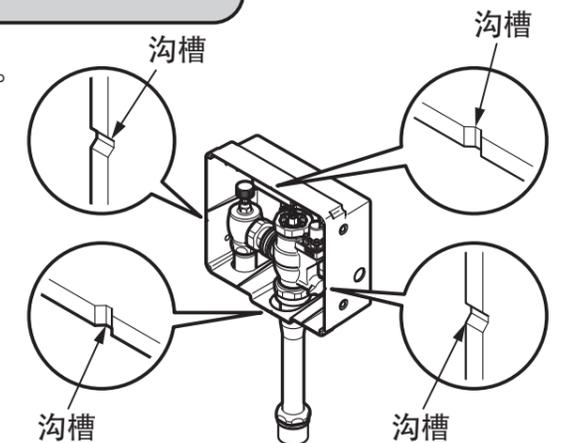
### 注意

考虑将操作面板放置在中央，需注意排水管中心和外壳中心偏移了11mm

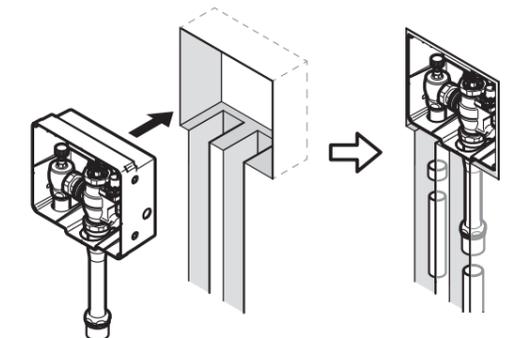
- ③将外壳嵌入已凿开的墙壁上，并校准位置。
- ④用合适配件或水泥临时固定外壳。

### 注意

画的中心线与沟槽(水平、排水管中心确认用)(4处)对齐，使其保持水平、垂直。



- ⑤现场自备长度适当进水管(25A, 现场自备), 连接接头(插接口、现场自备)。

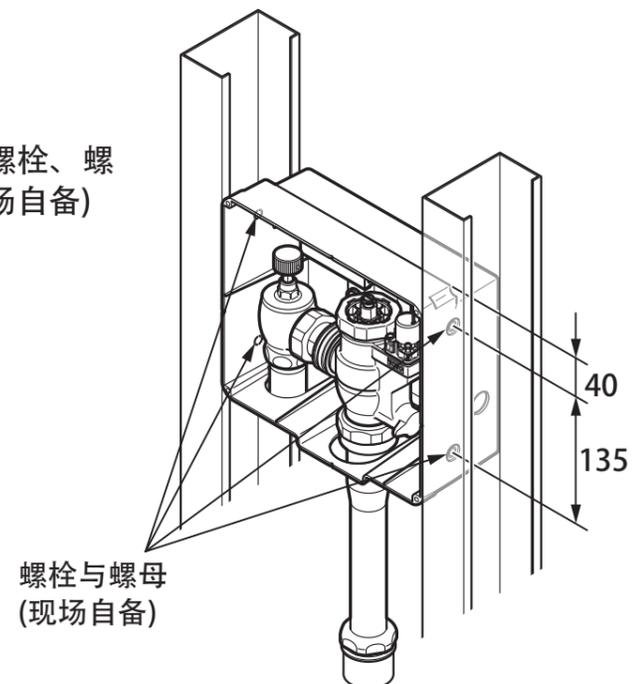


### 3-2 安装外壳

#### 干式施工法

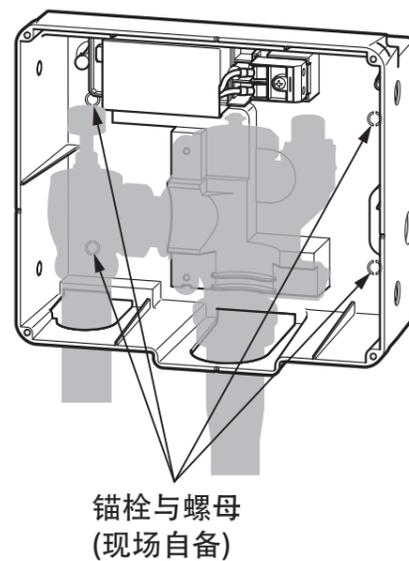
##### 【固定在轻钢龙骨上】

在外壳的两侧面及龙骨上开孔，用螺栓、螺母(现场自备)或十字槽自攻螺钉(现场自备)等将其固定。



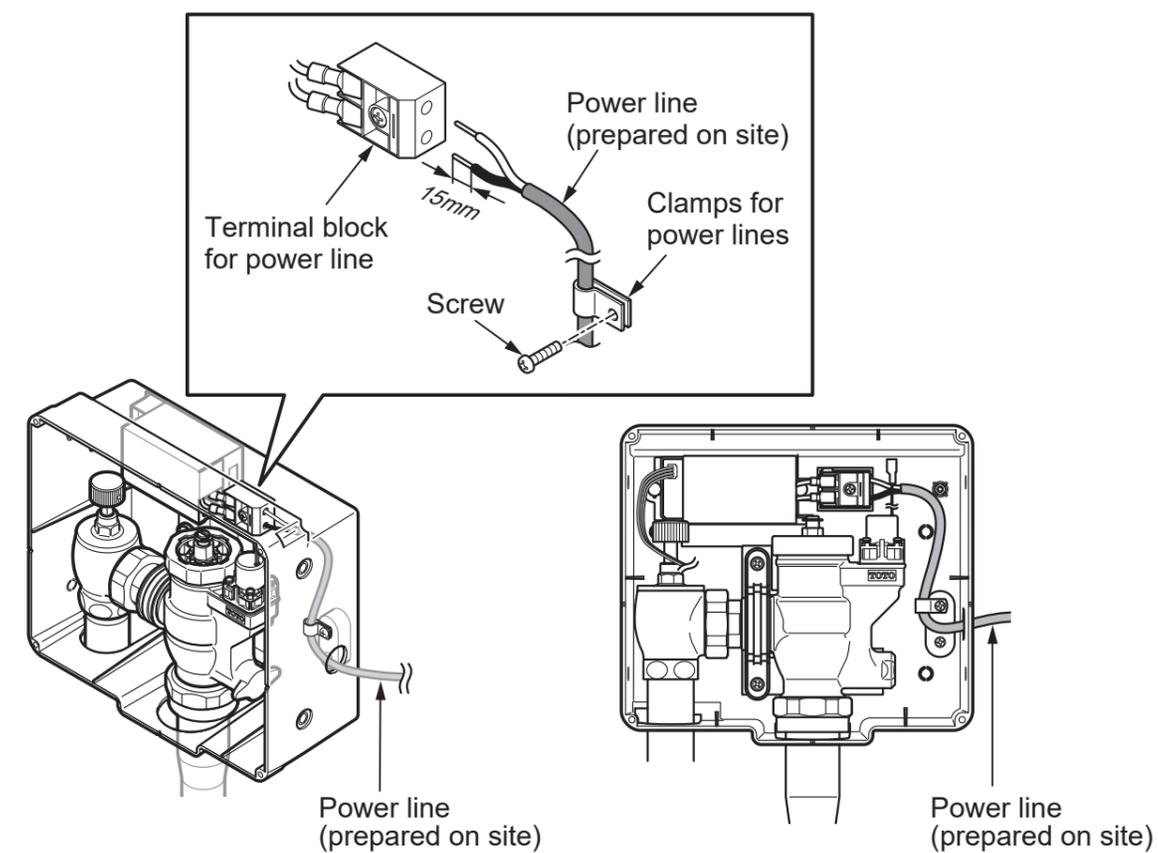
##### 【固定在背面墙上(混凝土)上】

在外壳背面开孔，用锚栓与螺母(现场自备)固定在指定位置。



### 4-1 Connection of power wires

- ① For the power cable, prepare a VVF cable (ø2mm) locally.
- ② Strip 15 mm of the sheath of the power wire (prepared on site) and check that the core wire is securely inserted into the terminal hole of the terminal block.
- ③ Screw the power wire (prepared on site) with a clamp for the power wire.

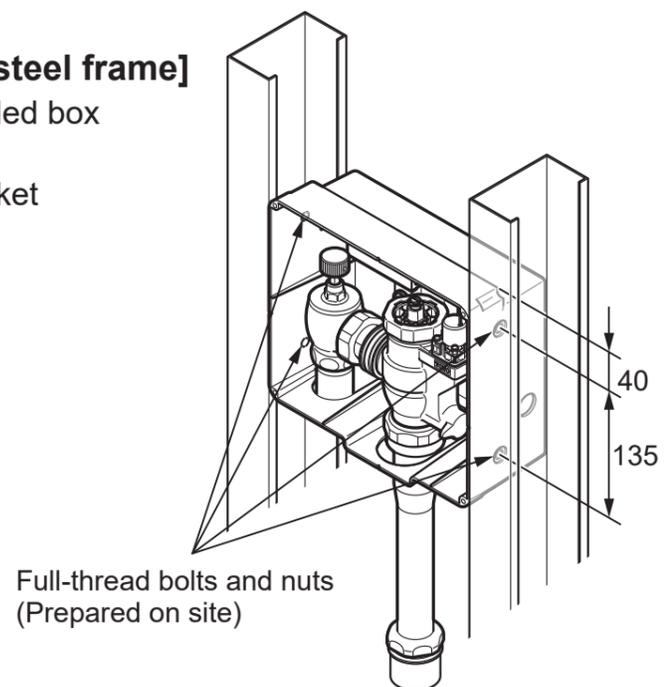


### 3-2 Box installation

#### Dry operation

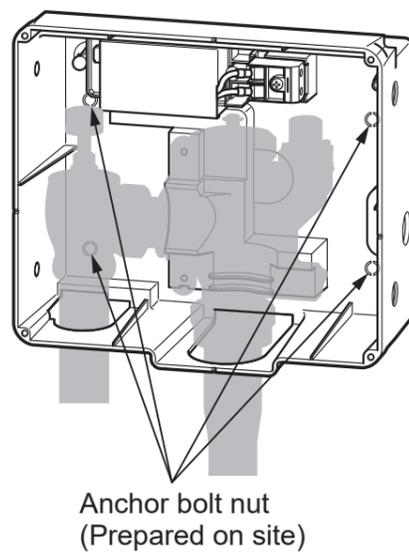
##### [Attach concealed box to the steel frame]

Drill holes on both sides of concealed box and steel frame, secure them with full-thread bolts, nuts, or cross socket tapping screws. (Prepared on site)



##### [Attach concealed box on the back wall (cement surface)]

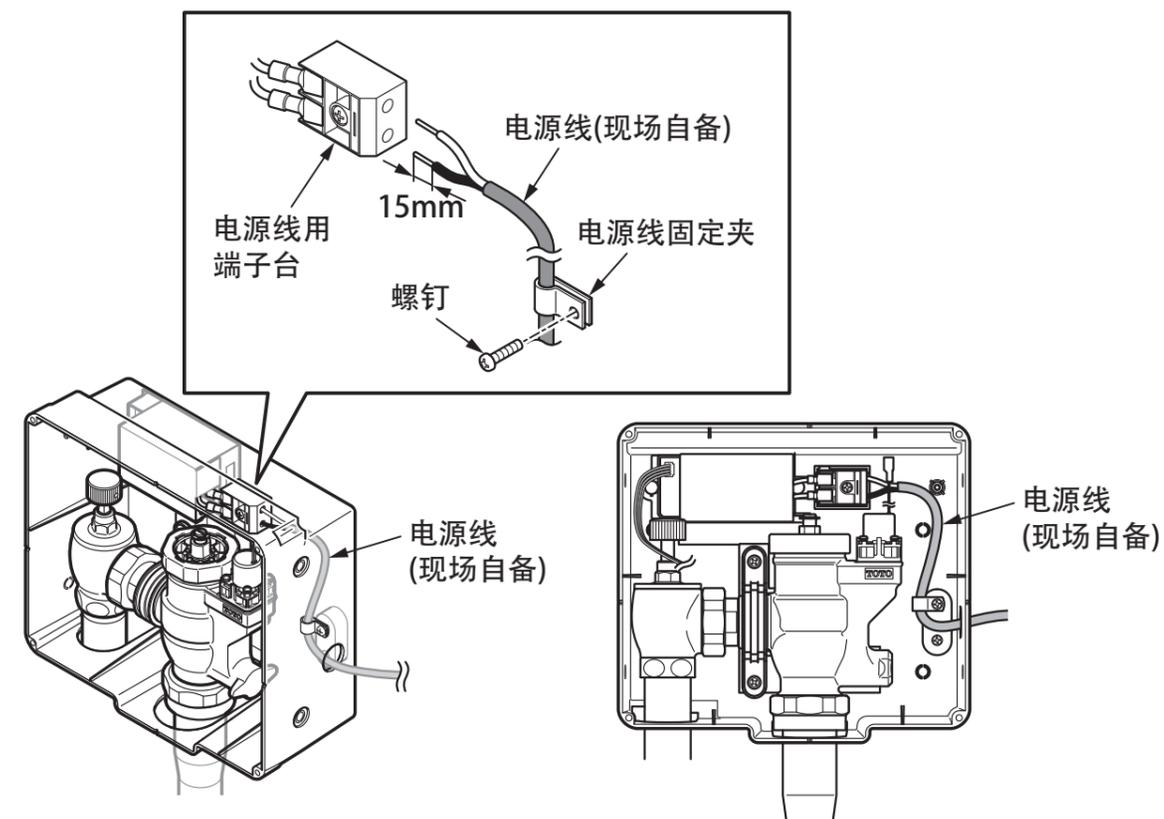
Drill holes in the back of concealed box, secure it to the back wall with anchor bolt nuts. (Prepared on site)



### 4-1 电源线的连接

#### 交流电型

- ①对于电源线, 请在现场安排VVF电缆 (Φ2mm)。
- ②剥掉15mm电源线(现场自备)的外皮, 将线芯务必全部插入电源线用端子台的端子孔中。
- ③用电源线固定夹和螺钉固定电源线(现场自备)。



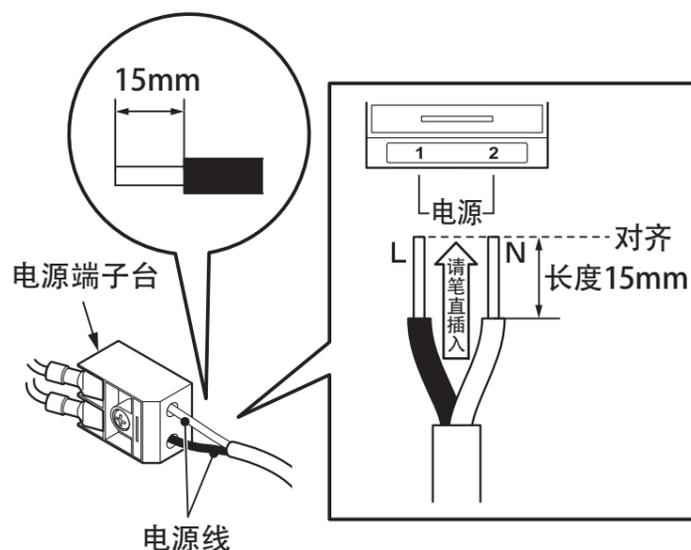
## 4-2 电源线的连接

### 重要 连接到电源端子台的注意点

- 剥掉15mm电源线(现场自备)的外皮, 将线芯务必全部插入电源线用端子台的端子孔中。

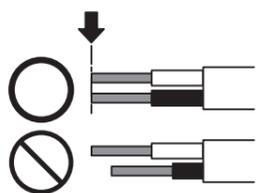
### 完全插入

连接完毕后, 目测检查, 确认电源线的线芯是否如右图所示正确的插到了电源端子台内。

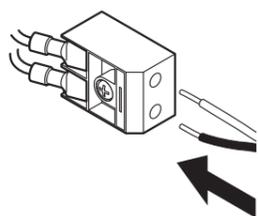


- 将电源线的线芯留出相同的长度 (在露出电源端子台部分的长度也请加工成一致。)

### 对其端面

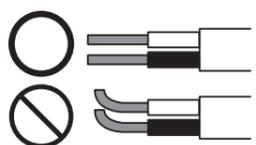


- 将线芯笔直的插入到电源端子台内。

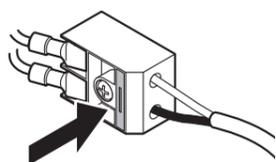


- 不要弯曲电源线的芯线。否则可能会造电源线前端不能完全地插入电源端子台内。

### 前端严禁弯折



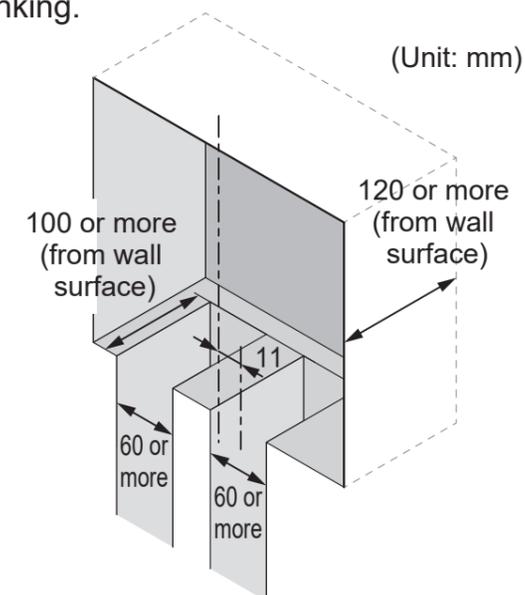
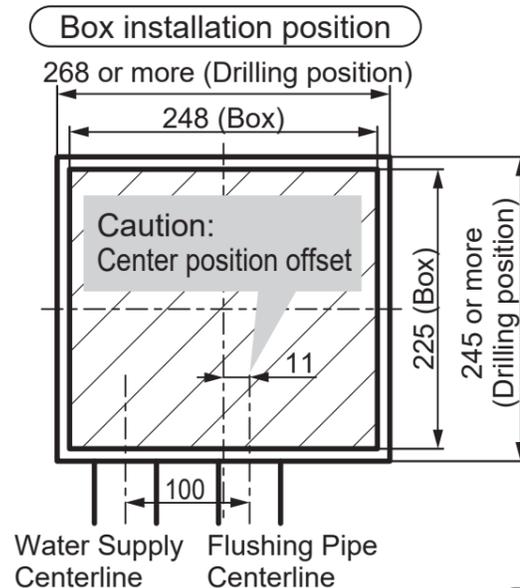
- 拆下电源线时, 请使用一字螺丝刀强力按压此部位, 然后拔出电源线。



## 3-1 Box installation

### Wet operation

- Ink the centerline of the installation position and digging position on cement walls.
- Dig the cement walls according to the Inking.



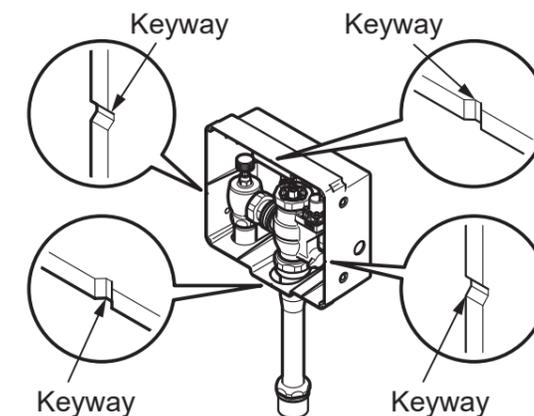
### Caution

Note that the drainage center and the center of concealed box are offset by 11 mm to center the control section

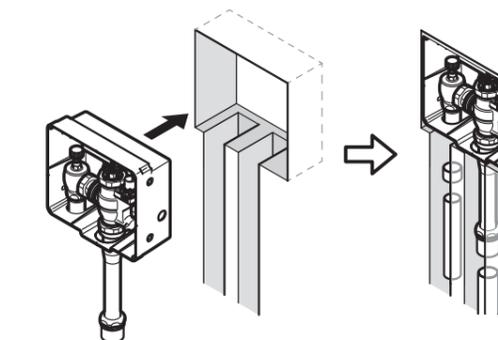
- Place concealed box on the wall and align it with the wall.
- Temporarily secure concealed box with inclusions or mortar.

### Caution

Align the centerline with the keyways (horizontal and drainage center) (four locations) so that the horizontal and vertical lines are aligned.

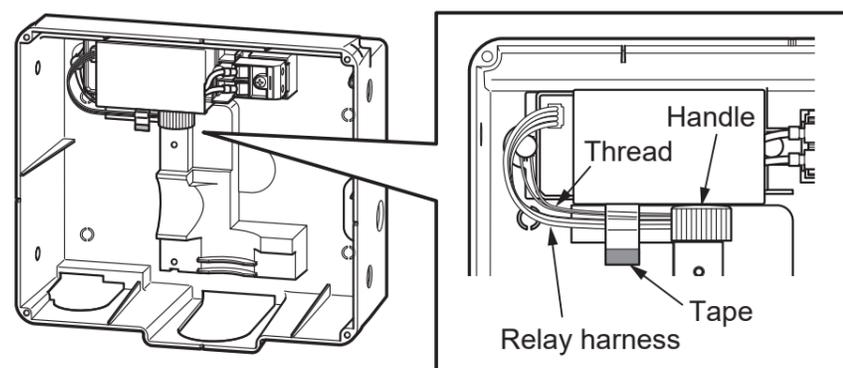


- Prepare water supply pipe (Prepared on site) and drain pipe (Prepared on site) in appropriate lengths.



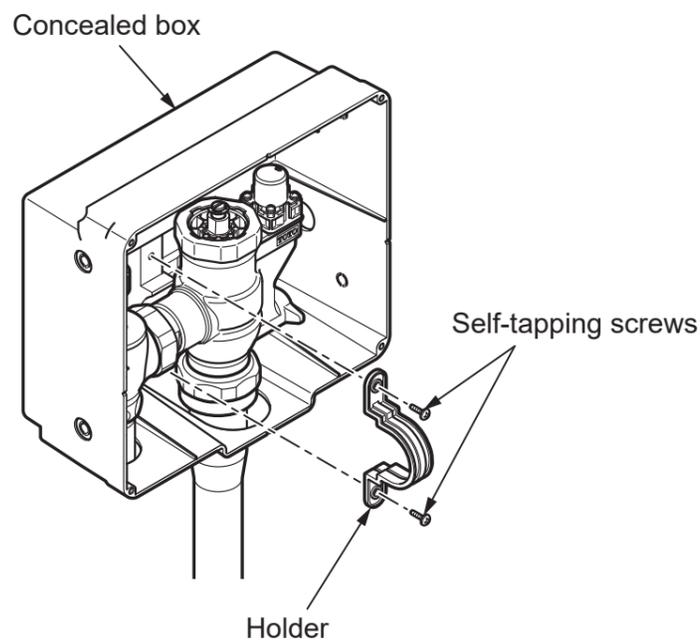
## 2 Assembly into concealed box (holder attachment)

① Peel off the tape holding the relay harness.



② The automatic flush valve fittings, water shutoff valve, and flushing pipe with inverted valve assembled in 6 - 1 are stored in the shape of concealed box.

③ Secure the flush valve and box using the holder and self-tapping screws.

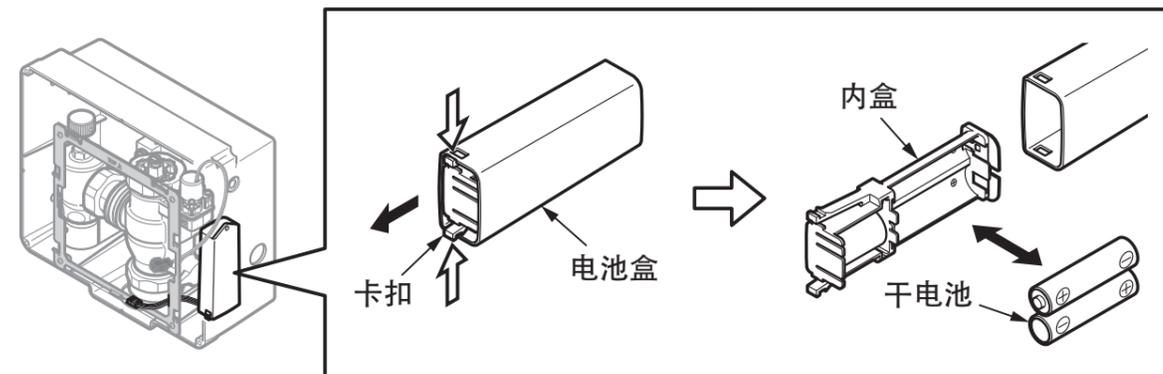


## 4-3 电源线的连接

### 干电池型

[干电池安装方法]

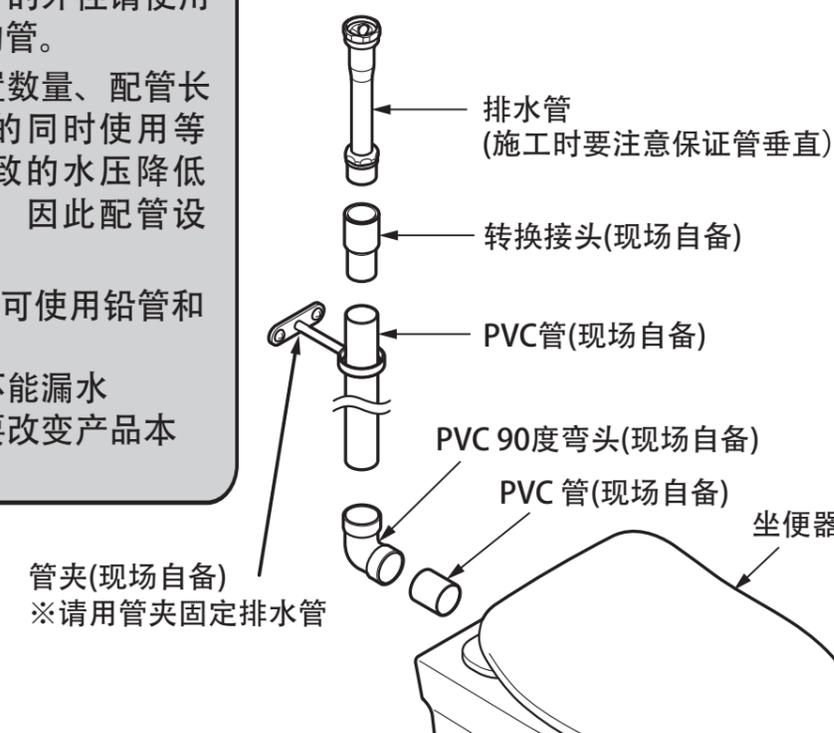
- ① 向内推电池盒下部的卡扣，取出内盒
- ② 更换干电池（5号 x 2节）后，将电池盒装回原来的位置
- ③ 电池盒应存放在外壳内



## 5 坐便器连接部和排水管的安装

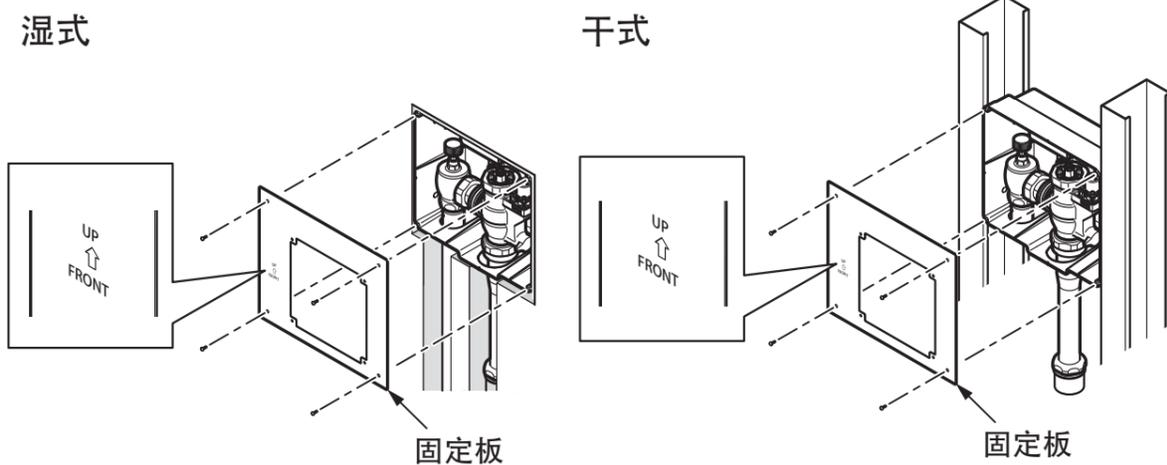
### 注意

- 与便器连接的管的外径请使用  $\Phi 32\text{mm}$  程度的管。
- 考虑器具的设置数量、配管长度、多个器具的同时使用等因素，可能导致的水压降低引起清洗不良，因此配管设计要适当。
- 除PVC管外，还可使用铅管和钢管。
- 施工后请确认不能漏水
- 施工时尽量不要改变产品本来的设计。



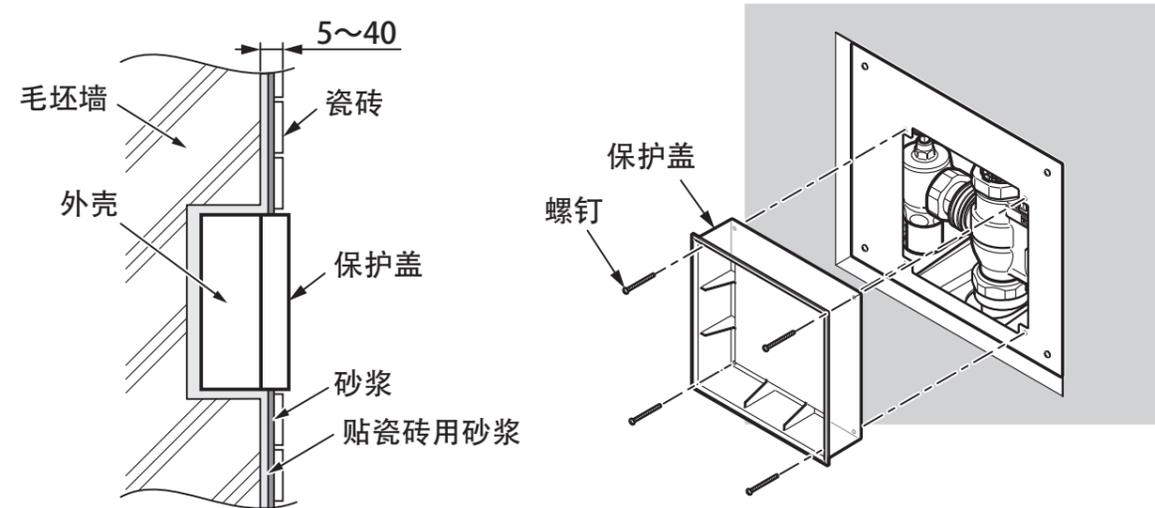
## 6 固定板的安装

①用附带螺钉(4根)将安装板固定在外壳上。



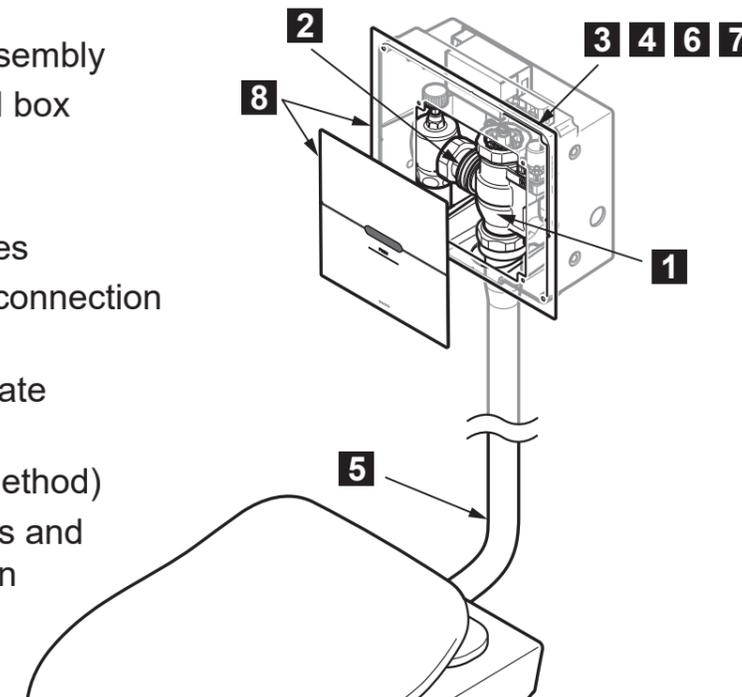
## 7 墙面填充(湿式施工)

- ①用螺钉(4个)将保护盖(附带)固定在外壳上。
- ②在外壳周围填入砂浆。
- ③墙面填充砂浆后，贴瓷砖。
- ④取出螺丝，拿下保护盖。



## 6 Installation Procedures (Concealed Type)

- 1 Automatic flush valve assembly
- 2 Assembly into concealed box (holder attachment)
- 3 Box installation
- 4 Connection of power wires
- 5 Installation of toilet seat connection and flush pipe
- 6 Assembly of mounting plate
- 7 Backfill of subgrade (only for wet operation method)
- 8 Connection of signal lines and installation control section



### 1 Automatic flush valve assembly

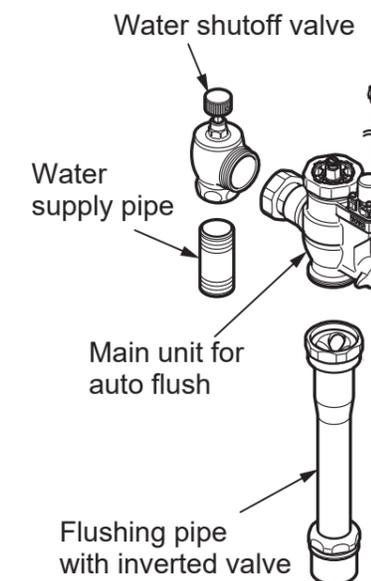
**Before installing the flush valve, it is imperative to completely remove garbage, grit, and other contaminants from the Water Supply Pipe.**

#### Caution

The attached water supply pipe is a SUS pipe. To prevent corrosion due to contact with dissimilar metals, be sure to use an insulated joint when connecting to pipes other than copper pipes.

All of the following steps shall be performed outside concealed box.

- ①Connect the attached water supply pipe to the stopcock.
- ②Connect the flushing pipe with inverted valve to the main unit for auto flush.
- ③Connect the main unit for auto flush to the water shutoff valve.



# 5 Finished Diagram

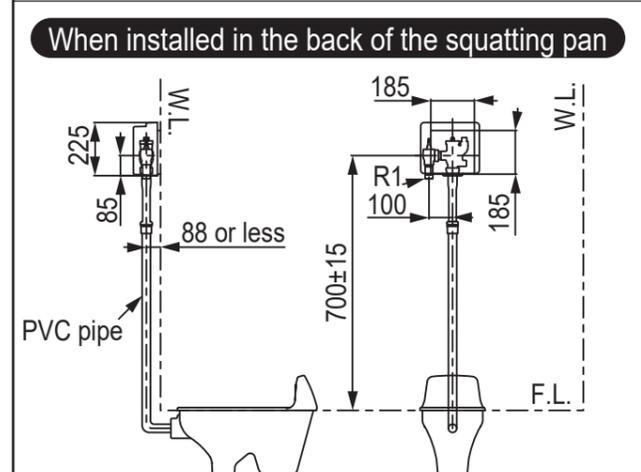
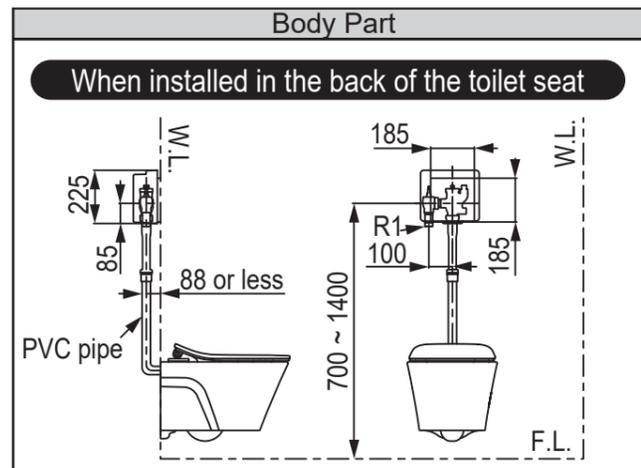
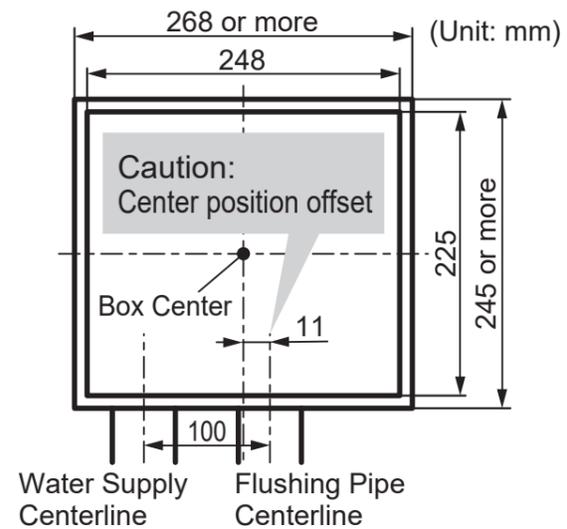
\*The Flush Valve may have slight differences from the diagram depending on the type you are using.

### Caution

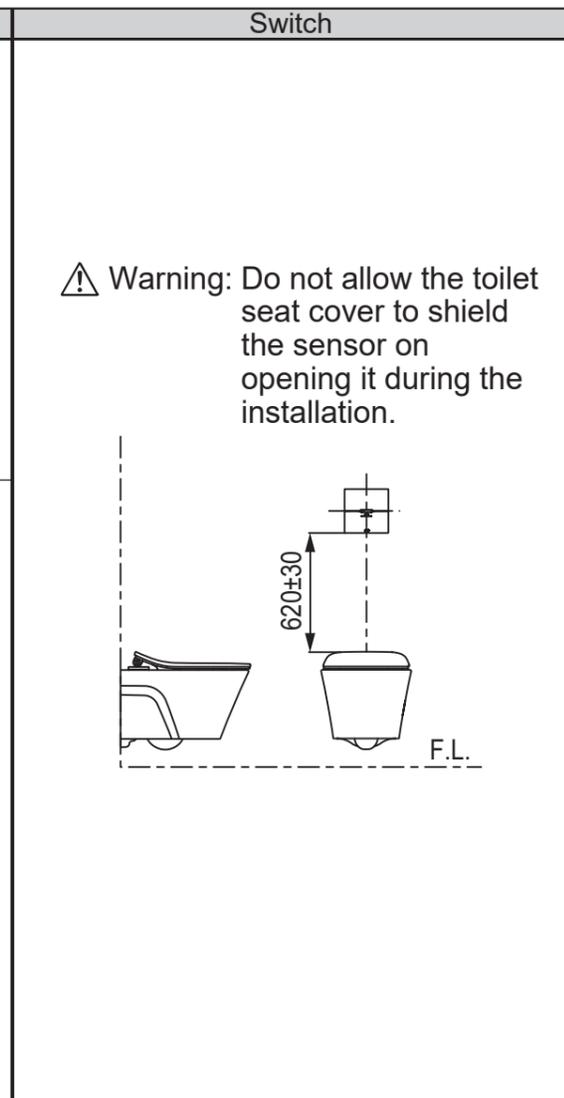
Note that the drainage center and the center of concealed box are offset by 11 mm to center the control section.

Performance cannot be guaranteed for installations other than those in the back and left construction conditions.

### Box installation position



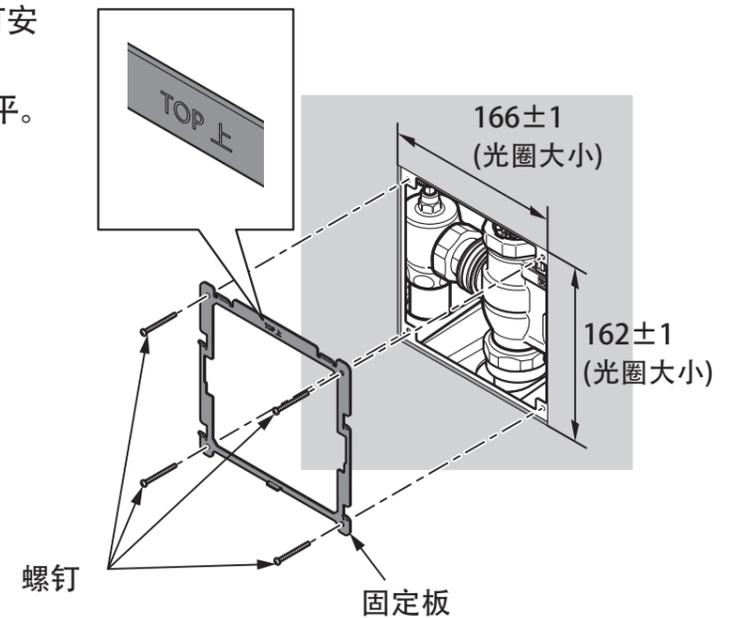
● Please also refer to the above dimensions when installing the armrest. Please confirm that the sensor works normally after installation.



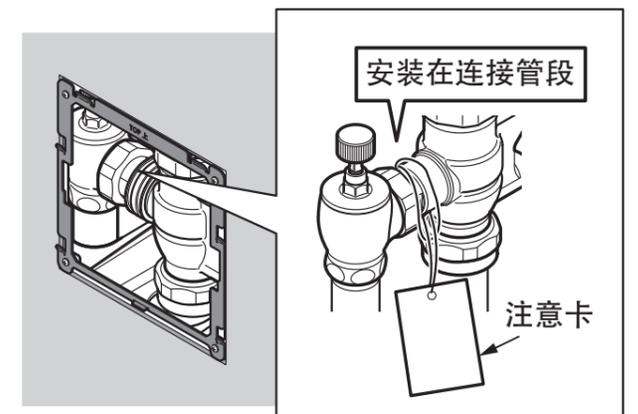
# 8-1 信号线的连接及操作面板的安装

① 操作面板的固定板用4个螺钉安装拧紧。

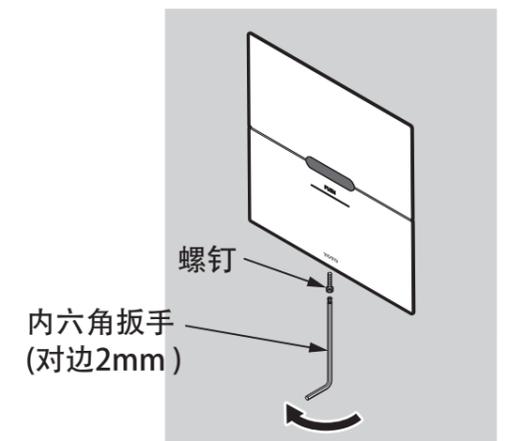
※ 固定后，检查固定板是否水平。



② 用绳子将注意卡系在容易看到的位置（如在截止阀或连接管处）。（只有在凹陷型的情况下）。



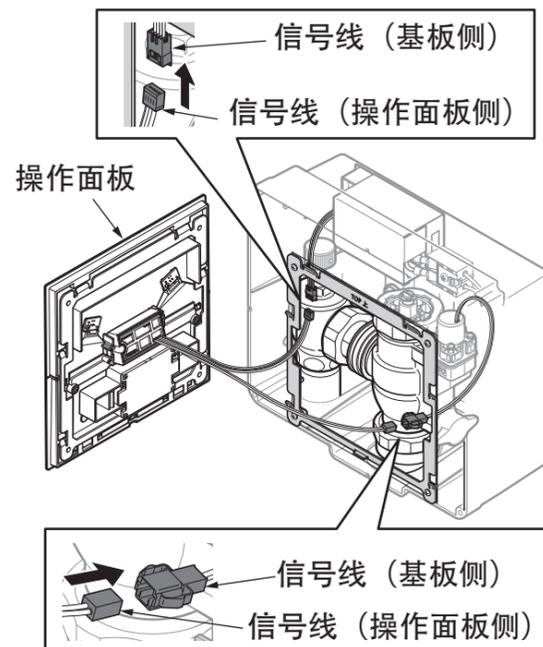
③ 卸下固定在操作面板上的六角形固定螺丝。



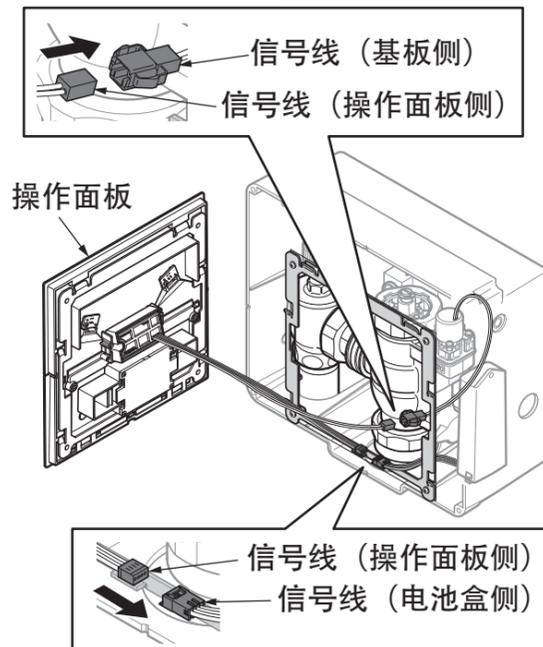
## 8-2 信号线的连接及操作面板的安装

④连接从操作盘伸出的信号线和外壳的基板信号线。自动冲洗阀本体侧伸出的电磁阀信号线也同样连接。※电池盒应存放在外壳内。

### 交流电型



### 干电池型



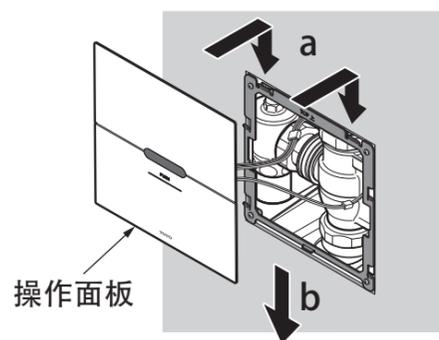
### 注意

连接电源后，障碍物学习10分钟。在此期间，请等待。

⑤将操作面板安装到固定板上。

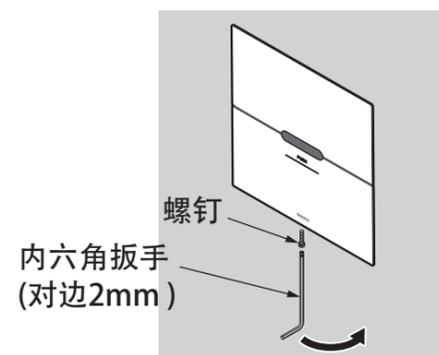
a. 将操作面板卡在固定板的卡爪(6处)上。

b. 沿墙面压下操作面板，使其与固定板卡紧。



⑥最后拧紧六角固定螺钉。

※确保操作面板上没有嘎嘎作响等现象。



## 3

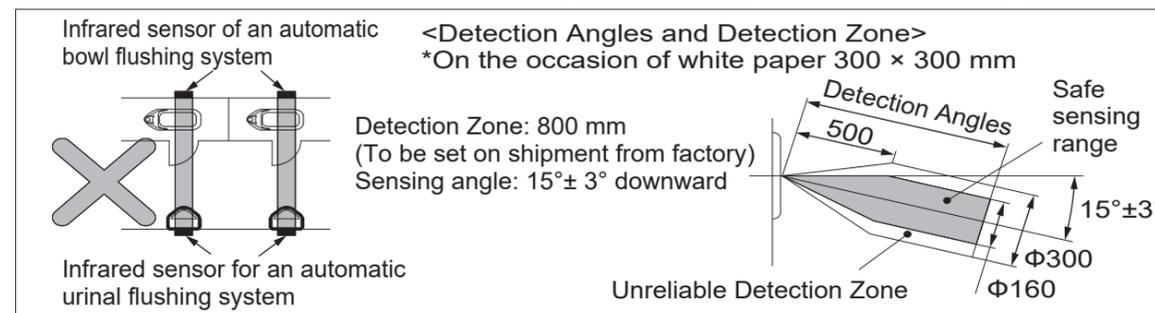
## Specifications

Types	Non-quantitative		Quantitative		
	TREF85*	TREF65*	TREF75U*	TREF75K*	TREF45L*
Toilet standard bowl flush volume	8.0 L	6.0 L	4.5 L (*120 seconds or more) 3.0 L (*6 seconds - 120 seconds) *Human body sensing duration. At 91L/min, the set factory conditions cannot exceed the upper limit of cleaning water volume.		4.8 L
Inlet water pressure	Minimum requisite water pressure (flowing)	FP: 0.1 MPa			
	Maximum requisite water pressure (static)	SP: 0.75 MPa	SP: 0.75 MPa *However, when the flow pressure is 0.5 MPa or more, the water stop valve needs to be adjusted.		
Power supply	TREF85U*/TREF65U* AC: 220 V TREF85K*/TREF65K* DC: 2.1 V-3 V Two No. 5 alkaline dry batteries		AC: 220 V	DC: 2.1 V-3 V Two No. 5 alkaline dry batteries	AC: 220 V
	*After connecting the power supply, 10 minutes is the wall study time.				
Length of the conductor	150 mm				
Human body sensing distance	800 mm				
Human body sensing duration	Sensing at successive 6 seconds				
Used water temperature range	1 ~ 40 °C				
Water supply	Tap water				
Water supply pipe diameter	R1				

## 4

## Before Installation

- Make sure the room space is 800 mm or more.  
(If the opposite wall is detected by the sensor, the product may not activate.)
- Be cautious to avoid damage to the surface of the sensor.
- The detection angles and detection zone are shown below.  
If the product is installed face to face with any of the urinal products from this company and other photoelectric sensing products are on the same straight line, false action may arise (as shown below). Please stagger the installation positions.



- Please install the water pipes and electric line after full arrangements are complete.
- Be sure to use the signal wire provided to connect the Auto Flushing Valve and the detection device.
- All products have undergone a water test before packing. So, it is not a product problem if some water droplets remain inside the flushing valve.

# 2

## Confirm Various Components and Names

(Please confirm if the following components are complete)

Body Part Details					
Control section (common)	Fixing plate (common)	Mounting plate (common)	Concealed box TREF75U* TREF85U* TREF45L* TREF65U*	Concealed box TREF75K* TREF85K* TREF65K*	
Water Shutoff Valve TREF85U* TREF85K* TREF65U* TREF65K*	Water Shutoff Valve TREF75U* TREF75K* TREF45L*	Main Unit for Auto Flush (common)	Protective Cover (common)	Warning tag (common)	
	*Handles are included with the box.		*After installation is complete, attach the tag to the product. (P.14)		
Water supply pipe (common)	Holder (common)	Battery case TREF75K* TREF85K* TREF65K*	Flushing Pipe with inverted valve (common)	Hex Tool (Opposite side 2 mm) (common)	Screws (4pcs) (common)
Gasket TREF75U* TREF75K* TREF45L*					
				<b>Others</b>	
Self-tapping screws TREF75U* TREF85U* TREF45L* TREF65U*	Clamps for power lines TREF75U* TREF85U* TREF45L* TREF65U*	Alkaline dry battery TREF75K* TREF85K* TREF65K*	Self-tapping screws TREF75K* TREF85K* TREF65K*	Instructions for installation/operation (common)	

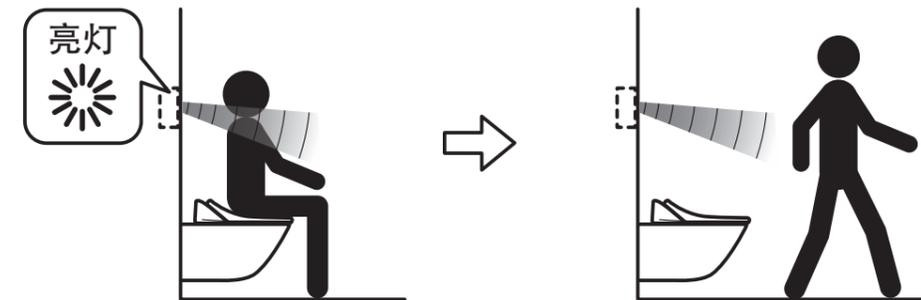
\*The Flush Valve may have slight differences from the diagram depending on the type you are using.

# 7

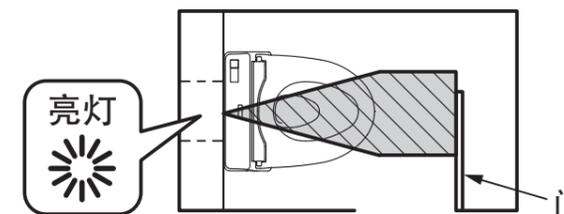
## 试运转

### 1 感应器试运转

在感应器前坐下，人体检测感应灯自动亮起，亮灯6秒后离开感应灯自动熄灭，约3秒后，产品自动冲洗。



感应器在 10 分钟以上感应到障碍物时，会自动调节距离，在此期间需稍作等待。上述操作完成后，感应器仍感应到卫生间墙壁门板或便器时，必须重新设置感应距离。



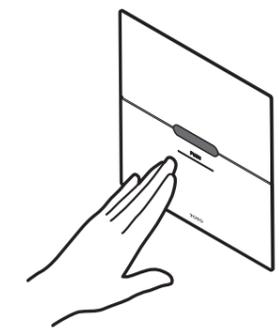
※感应器如果感应到墙壁或门，则感应人体功能无法正常使用，不能进行大小冲洗的识别和自动冲洗。

### 2 手动冲洗试运转

请确认按下操作面板的按钮后，产品冲洗。但是请注意，冲洗 1 次之后大约 11 秒后才能再次冲洗。

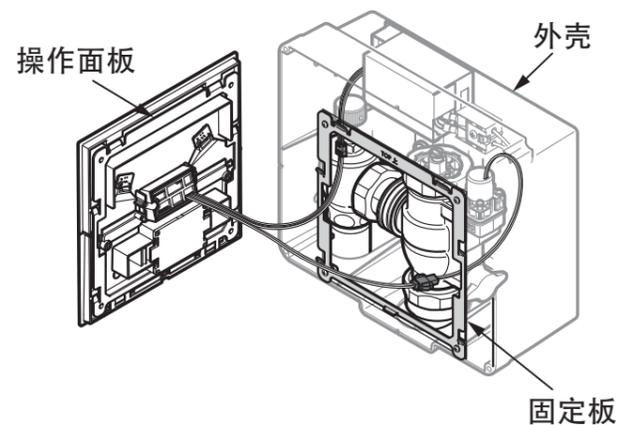
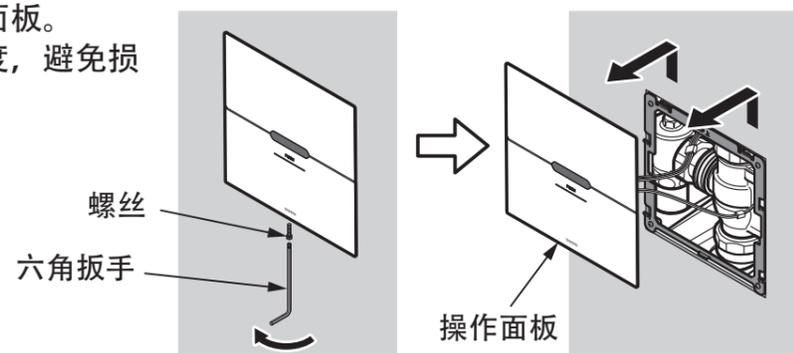
#### 手动冲洗

确认内容：按下按钮后，产品冲洗。

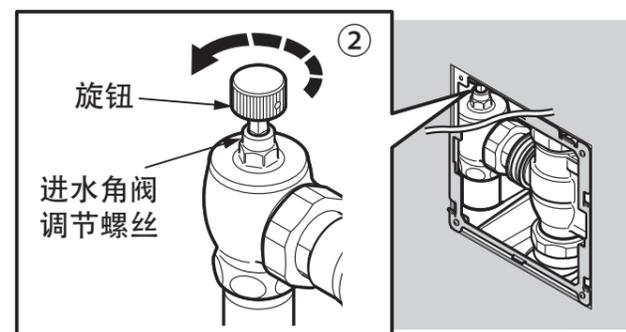


### 3 水量的确认

- ①从固定板上拆下操作面板。  
※拆卸时注意拆卸力度，避免损坏信号线。



- ②使用图示的旋钮，先将进水角阀完全关闭，然后边慢慢打开边调节。



- ③边确认大便器的冲水，边调节到合适的水量。

由于定流量阀的特性所致，在一些现场的设置水压下，会发出脉动声音，属于正常现象。如果觉得不适，可通过拧小进水角阀减小声音。

### 1 Precautions for Safety (be sure to comply to ensure safety)

⚠ Caution		
 Prohibition	Please do not install any throttling device that inhibits or obstructs normal water flow. (Otherwise, it may affect flushing performance and lead to water leakage.)	Throttling device
 It is imperative to execute	Be sure to install an air vent valve in the water supply pipe where air may be present so that no air remains in the pipe. (After new construction, alteration work, or restoration of the water supply after a water stoppage, if the supply to the apparatus is mixed with a large amount of air and water, it may cause the apparatus to break or malfunction and cause injury or leakage, which may lead to property damage contact with water.)	
 Dismantling is prohibited	For any person other than professional service personnel, please do not dismantle or repair without authorization. (Otherwise, faults or water leakage may occur.)	
 It is imperative to execute	When cleaning the piston and hydrant filter, do not remove the piston and hydrant filter at the same time. Make sure that the water tap or main valve is closed before proceeding. (Check the maintenance and care page). (Otherwise, it will stain furniture or cause damage to items due to water spray.)	
 It is imperative to execute	Use appropriate protective equipment such as gloves when working. (There is a risk of unexpected injury.)	

### ⚠ Caution

- For use in places where frost damage may occur, implement anti-freezing measures. The parts will sustain frost damage, which may cause water leakage and property loss. Damage caused by frost is repaired for a fee even during the warranty period. Please make sure that the ambient temperature of the product is always above 1°C.

### Anti-freezing measures

- For use in places where frost damage may occur, implement anti-freezing measures.
1. The parts will sustain frost damage; therefore, anti-freezing measures must be implemented.
  2. Damaged parts caused by frost are repaired for a fee even during the warranty period.
  3. After the construction is completed or when the product is not used for a long time, prepare to prevent sudden drops in temperature and prevent frost damage to the product.
  4. Because of the risk of frost damage, please make sure that the ambient temperature of the product is always above 1°C.

# 1 Precautions for Safety (be sure to comply to ensure safety)

Before installation, please read carefully the "Precautions for Safety" section and install the unit correctly according to the information therein.

- Symbols are used for safe and proper installation of the Flush Valve and in order to alert you to possible personal injury or damage to property.
- The precautions that must be complied with are described and distinguished by the following markings.

The symbols and their definitions are as follows.

Symbols	Definition
<b>Warning</b>	Ignoring these symbols may cause personal injury or even death.
<b>Caution</b>	Ignoring these symbols may cause personal injury or property damage.

	This picture means the action is not allowed or [prohibited]
	Do not install the product in an area exposed to contact with water, condensation, or high humidity
	Do not disassemble
	The instructions that must be followed and are considered mandatory

<b>Warning</b>		
	Do not splash water on the power plug or the function part. It may cause fire or electric shock.	
	Please do not install the product in an area exposed to contact with water, condensation, or moisture.	
	Do not unplug the power cord with wet hands. (Otherwise, it may lead to electric shock.)	
	When plugging the power wire into the terminal block, insert it securely all the way to the base. (Otherwise, it may lead to fire or electric shock.) *Be sure to turn off the power breaker before this operation.	

<b>Caution</b>		
	Please do not hit the product. (Otherwise, it may cause a malfunction or water leakage.)	
	Please do not install the product where it is exposed to freezing temperatures. (Otherwise, it may cause a malfunction or water leakage.)	

# 8 生产厂家与销售商

## TOTO 检查合格证

执行标准：见包装箱上的标签  
 产品型号：见包装箱上的标签  
 产品名称：见包装箱上的标签  
 生产日期：见包装箱上的标签

组装工厂：东陶机器（广州）有限公司  
 厂址：广州市番禺区南村镇兴南大道715号

东陶（中国）有限公司  
 全国售后服务电话：800-820-9787（固定电话）  
 400-820-9787（手机用户）



扫描二维码，  
服务预约，方便快捷

销售商：东陶（中国）有限公司  
 地址：北京市朝阳区光华路1号北京嘉里中心北楼1915室  
 网址：[www.toto.com.cn](http://www.toto.com.cn)



# MEMO

# TOTO

## Inductive Toilet Bowl Flush Valve (Concealed Type)

### Quantitative

TREF75U\* <Concealed AC type>

TREF75K\* <Concealed dry battery type>

TREF45L\* <Concealed AC type>

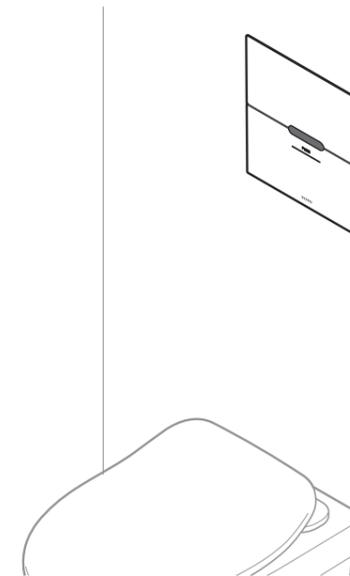
### Non-quantitative

TREF85U\* <Concealed AC type>

TREF85K\* <Concealed dry battery type>

TREF65U\* <Concealed AC type>

TREF65L\* <Concealed dry battery type>



- Thank you very much for your recent purchase of our TOTO products.
- Please read in detail all the information contained in this manual in order to ensure correct use.
- Please keep this manual safe after reading for future reference.
- As the product model is constantly updated, the actual product may not look the same as is shown in the diagram, but the basic installation and operation principles are the same. The product final model is the real product.

1.Precautions for safety..... 1 ~ 2	Preface
2.Confirm Various Components and Names ..... 3	
3.Specifications ..... 4	
4.Before installation ..... 4	Installation Method
5.Finished Diagram ..... 5	
6.Installation Procedures (Concealed Type) ..... 6 ~ 15	
7.Trial Run ..... 16 ~ 17	
8.Manufacturer and Vendor..... 18	