## **Instructions for Use**

# Urinal flush plate for Prevista Visign for Public 12







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## 1 About these instructions for use

Trade mark rights exist for this document; for further information, go to *viega.com/legal*.

## 1.1 Target groups

The information in this instruction manual is directed at the following groups of people:

- Heating and plumbing experts and trained personnel
- Qualified electricians
- Operators
- Consumers

Individuals without the above-mentioned training or qualifications are not permitted to mount, install or, if appropriate, maintain this product. This restriction does not extend to possible operating instructions.

The installation of Viega products must take place in accordance with the generally accepted rules of engineering and the Viega instructions for use.

## 1.2 Labelling of notes

Warning and advisory texts are set aside from the remainder of the text and are labelled with the relevant pictographs.



#### **DANGER!**

This symbol warns of possible life-threatening injury.



### **WARNING!**

This symbol warns of possible serious injury.



#### **CAUTION!**

This symbol warns of possible injury.



#### **NOTICE!**

This symbol warns of possible damage to property.





This symbol gives additional information and hints.

### 1.3 About this translated version

This instruction for use contains important information about the choice of product or system, assembly and commissioning as well as intended use and, if required, maintenance measures. The information about the products, their properties and application technology are based on the current standards in Europe (e.g. EN) and/or in Germany (e.g. DIN/DVGW).

Some passages in the text may refer to technical codes in Europe/ Germany. These should serve as recommendations in the absence of corresponding national regulations. The relevant national laws, standards, regulations, directives and other technical provisions take priority over the German/European directives specified in this manual: The information herein is not binding for other countries and regions; as said above, they should be understood as a recommendation.



## 2 Product information

## 2.1 Standards and regulations

The following standards and regulations apply to Germany / Europe and are provided as a support feature.

#### Regulations from section: Fields of application / Mounting conditions

Scope / Notice	Regulations applicable in Germany
Protection area for installation of the power pack in shower and bath rooms	VDE 0100-701

#### Regulations from section: Technical data

Scope / Notice	Regulations applicable in Germany
Flush flow	DIN 3265
Noise class	DIN 4109

## 2.2 Safety advice



# DANGER! Danger due to electrical current

An electric shock can lead to burns and serious injury and even death.

- Work on the electrics may only be carried out by trained electricians.
- Switch off the mains voltage before connecting the power pack.

#### 2.3 Intended use

## 2.3.1 Areas of application

The urinal flush plate is intended for the contact-free actuation of flushes in urinals.



#### Viega Hygiene function

Flushes can be actuated at certain times via the Viega Hygiene function to prevent stagnation in the potable water pipelines.

#### 2.3.2 Maintenance

The magnet valve should be cleaned once a year to ensure fault-free operation. See  $\mathsepsilon$  Chapter 3.5.2 'Cleaning the magnet valve' on page 25

#### 2.4 General notes



Physical environmental influences can impair the control function.

The Viega Service Center will answer any further questions on this subject.

- If you notice any damage on the product or individual components, do not carry out a repair. Instead, have the product replaced by qualified personnel.
- This product is not intended for use by persons (including children) with restricted physical, sensory or mental aptitude or lack of experience and/or knowledge.
- Make sure that children do not play with this product.

#### **Symbols**

Observe the symbol listed on the label:

Symbol	Description
CE	CE marking, Product Safety in Europe
EAC	EAC marking, registration of products in the territory of the Customs Union



Symbol	Description	
	Direct current	
	Protection class III	
	The marked product must not be disposed of as household waste.	



## 2.5 Product description

### 2.5.1 Overview

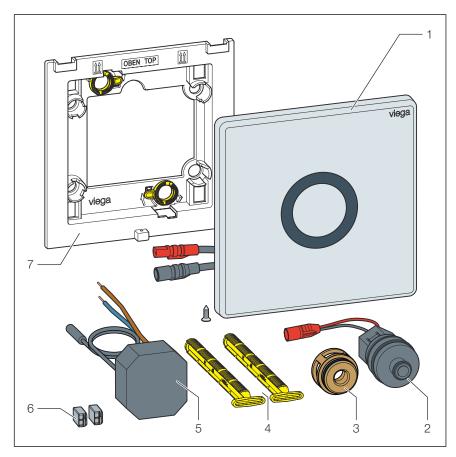


Fig. 1: Scope of delivery

- 1 Flush plate
- 2 Magnet valve
- 3 Valve adapter
- 4 Retaining bolt
- 5 Power pack
- 6 Clamps
- 7 installation frame

### 2.5.2 Technical data

The product has the following technical data:



Operating voltage	Primary 100-240 V AC, 50-60 Hz, 100 mA	
	Secondary 6.5 V DC/SELV	
Flow pressure	0.05-0.5 MPa (0.5-5 bar)	
Calculated flow	0.3 l/s	
Flush flow, see & 'Regulations from section: Technical data' on page 5	0.3-0.7 l/s	
Noise class, see \$ 'Regulations from section: Technical data' on page 5	2	

## Voltage and current

	Voltage [V]	Current [mA]
Flush plate	6.5	3
Magnet valve	6	220



## 2.5.3 Connection diagram

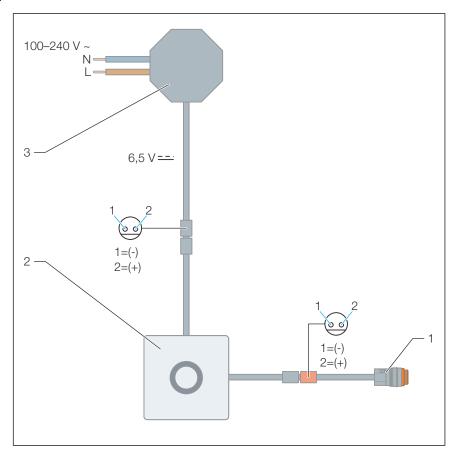


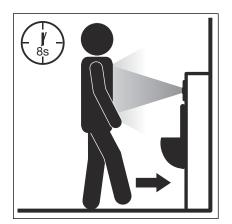
Fig. 2: Connection diagram, power pack, urinal flush plate for Prevista

- 1 Magnet valve
- 2 Urinal flush plate for Prevista
- 3 Power pack



### 2.5.4 Operating mode

#### Infrared actuation



Flush actuation takes place without contact via an infrared sensor on the flush plate.

The flush volume can be set in four stages.

In order to actuate a flush, a person must be within the detection area of the infrared sensor for at least 8 seconds.



If a person leaves the detection area, a flush is automatically actuated.

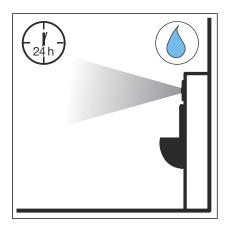
Depending on the setting, the flush duration is between 2 and 15 seconds.



A flush cycle can also be manually actuated by placing a hand briefly in front of the sensor.



#### **Hygiene function**



Stagnation can lead to the build up of germs (e.g. legionella) in potable water pipelines. It is important to rinse the pipeline regularly to prevent the build up of bacteria. The Hygiene function was developed for this reason.

If no actuation was carried out during the set period of time, the Hygiene function automatically actuates a hygiene flushing.

The interval for the hygiene flushing can be set in five levels.

## 2.5.5 Setting options

#### Settings for the infrared sensor

#### Range of the infrared sensor

The close range is set at 0 to 3 cm.

The far range can be set as follows:

- Close range (approx. 400 mm), so that the flush cannot be inadvertently actuated.
- medium range (approx. 450 mm, factory setting)
- Far range (approx. 490 mm), so that the automatic flush actuation also works at a greater distance from the urinal.

#### Lid in front of sensor

This function is intended for the case that an open lid covers the sensor. The function is deactivated in the factory settings. If the function is activated, a flush cycle is actuated as soon as the lid is removed from the sensor zone.

Viega recommends however to make sure during planning that the lid is not placed in front of the sensor in order to guarantee perfect functionality.

#### Flush settings

#### Flush duration

The flush duration can be set in four levels. Using the guide values from the table below, you can determine the flush volume on the basis of flow pressure and flush duration:



Flow pres- sure	Flush dura- tion	Flush dura- tion	Flush dura- tion	Flush dura- tion
	2 seconds	5 seconds	10 seconds	15 seconds
0.1 MPa	0.5	0.9 l	2.2	3.5
(1 bar)				
0.2 MPa (2 bar)	0.9 I	1.8	4.0 I	5.6
(Z Dai)				
0.3 MPa (3 bar)	1.0	2.2	4.5	6.81
0.4 MPa (4 bar)	1.2	2.7	5.2	7.6
0.5 MPa (5 bar)	1.3	2.91	5.7	91

#### Hygiene flushing

The setting determines if respectively how long after non-use a hygiene flushing is actuated.

The following settings are possible:

- Hygiene function deactivated
- Hygiene flush 1 hour after the last use
- Hygiene flush 12 hours after the last use
- Hygiene flush 24 hours after the last use (factory setting)
- Hygiene flush 72 hours after the last use
- Hygiene flush 168 hours after the last use

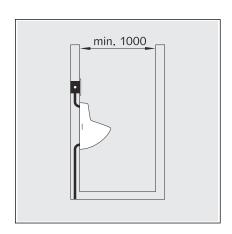


## 3 Handling

## 3.1 Assembly information

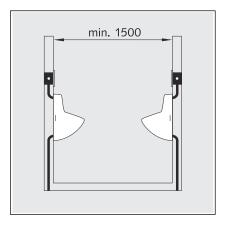
### 3.1.1 Mounting conditions

#### Minimum intervals



The following minimum distances must be complied with to ensure the infrared sensor works perfectly:

- A minimum distance of 1000 mm must be maintained to the opposite walls.
- If high-gloss wall claddings (polished tiles, mirrors, etc.) are situated opposite, increase the minimum distance to 1500 mm.



■ A minimum distance of 1500 mm must be maintained to urinals situated opposite with infrared sensors.



#### Installation position of the power pack

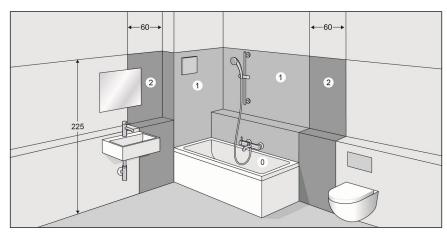


Fig. 3: Protected zones

According to the applicable regulations, installation of the power pack in the protected zones 0 and 1 of shower rooms and bathrooms is not permitted, see % 'Regulations from section: Fields of application / Mounting conditions' on page 5.

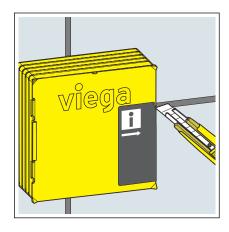
Viega recommends installing the power pack outside of the protected zones 0–2.

## 3.2 Assembly

## 3.2.1 Inserting the magnet valve

#### Requirements:

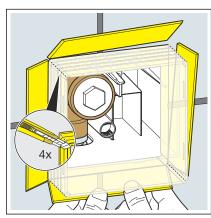
- The pre-wall element has been mounted.
- The tiling work is completed.
- The revision opening is freely accessible.
- The urinal ceramic has been mounted.
- Cut into the sticky tape of the shaft cover.



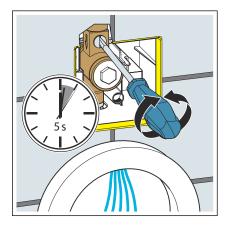




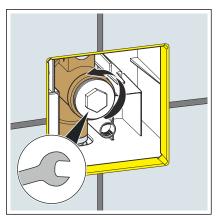
Remove the shaft cover.



- Cut into the corners of the revision shaft.
- Fold the sides of the revision shaft outwards up to the tile level and snap them off.

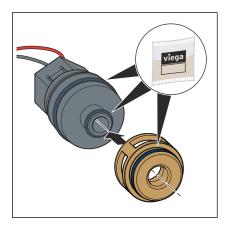


- Open the shut-off with a screwdriver for a few seconds to rinse the pipeline.
- Re-close the shut-off.



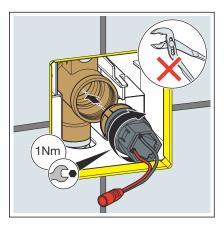
Remove the seal.





- Grease the sealing elements.
- Place the valve adapter on the magnet valve.

**NOTICE!** Ensure that the sealing element sits in the groove.



- Place the magnet valve on straight and carefully screw in as far as it will go (fine thread).
- Screw in the magnet valve (size 27).

max. torque: 1 Nm

### 3.2.2 Mounting the power pack



# DANGER! Danger due to electrical current

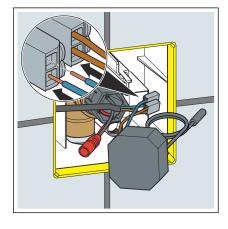
An electric shock can lead to burns and serious injury and even death.

- Only allow electrical work to be carried out by qualified electricians.
- Always de-energise the connection cable before work is commenced.

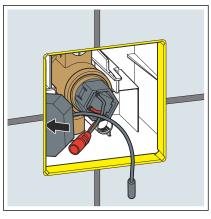


#### Requirements:

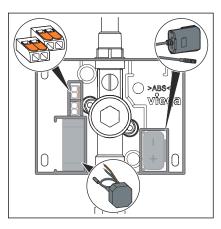
- A 230 V mains connection is available on site.
- The installation position of the power pack complies with the requirements in acc. with ∜ 'Installation position of the power pack' on page 15.
- The connection cable is de-energised.
- Push the cables into the terminals.



Push the power pack into the revision opening.

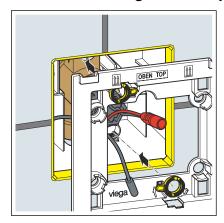


Position the power pack, the battery compartment and the terminals.

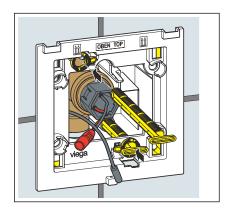




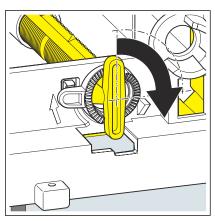
## 3.2.3 Mounting the flush plate



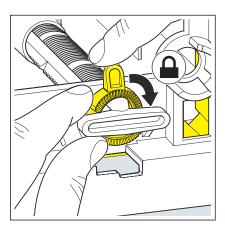
Put on the installation frame.



Insert the retaining bolts.

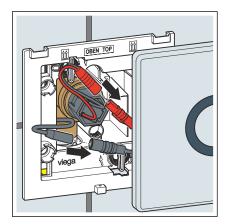


Turn the retaining bolts by 90° in a clockwise direction.



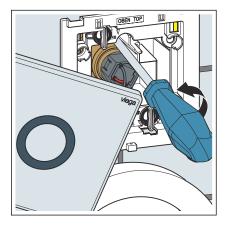
- Align the installation frame.
- To fix the retaining bolts, turn safety rings in a clockwise direction.



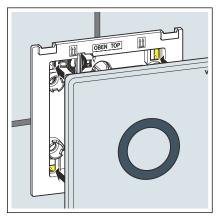


- Connect the magnet valve cable to the control.
- Connect the power pack to the control.

**INFO!** Stand to the side of the panel so that you are not in the sensor's detection area.



Open the shut-off valve.



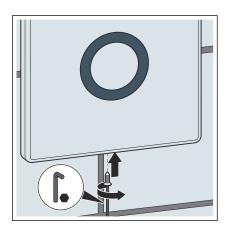
Replace the flush plate.



□ The infrared sensor is calibrated (approx. 60 seconds); the flush plate emits red light during this time.

The flush plate is operative. The calibration of the flush plate may take up to 5 additional minutes. During this time, the flush plate lights up every 10 seconds.





Screw on the flush plate.

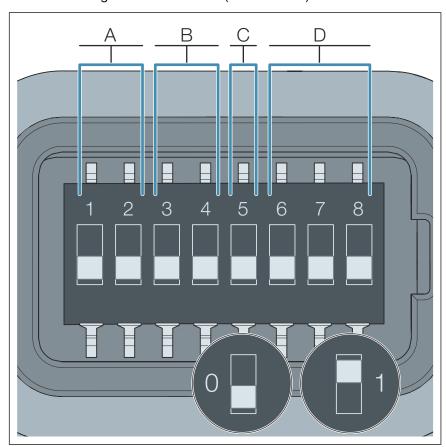


## 3.3 Commissioning

## 3.3.1 Setting the flush

The range, flush duration, hygiene flushing and "Lid before sensor" parameters are set via the DIP switches of the IR control.

Make the settings in the currentless (unconnected) state.



- A Range
- B Flush duration
- C "Lid in front of sensor"
- D Hygiene flushing
- 0 DIP switch position: OFF
- 1 DIP switch position: ON

#### Assignment of the DIP switches:

- Switches 1-2 determine the range of the infrared sensor.
- Switches 3-4 determine the flush duration.
- Switch 5 activates the "Lid in front of sensor" function.
- Switches 6-8 determine the interval of the hygiene flushing.



## Setting the range (A)

Range	in mm	Position of switches 1-2	
		1	2
Short	approx. 400	0	1
Medium	approx. 450 (factory setting)	0	0
Long	approx. 490	1	0
Medium	approx. 450	1	1

## Setting the flush duration (B)

Flush duration (in seconds)	Position of switches 3-4	
	3	4
2	0	1
5	1	0
10 (factory setting)	0	0
15	1	1

## Setting "Lid in front of sensor" (C)

"Lid in front of sensor"	Position of switch 5	
OFF (factory setting)	0	
ON	1	

### Setting the hygiene flushing (D)

Interval (in hours)	Position of switches 6–8		
	6	7	8
1	0	0	1
12	0	1	0
24 (factory setting)	0	0	0
72	0	1	1
168	1	0	0
OFF	1	1	1



## 3.4 Errors, faults and remedy



In case of malfunctions, disconnect the model from the power supply and reconnect it after one minute.

Fault	Cause	Solution
The urinal does not flush after being actuated via the flush plate.	Unknown	Disconnect the flush plate from the power supply for 60 seconds and reconnect it.
	No supply voltage.	Check the plug connections.
	The shut-off valve closed.	Open the shut-off valve.
	The sensor field dirty or damaged.	Clean the cover plate, replace it if necessary.
	The magnet valve is dirty or damaged.	Clean the magnet valve, replace if required.
		Schapter 3.5.2 'Cleaning the magnet valve' on page 25
	The control is defective.	Replace the base frame.
	The red LED flashes quickly during the first minute after commissioning, although there is no-one in the sensor detection area.	Reduce the range of the infrared sensor.  Solution 'Setting the range (A)'  Solution page 23
	The range of the infrared sensor is set too large.	
	The red LED flashes in the first minute after commissioning. The flashing does not become quicker even though there is someone in the detection area.	Increase the range of the infrared sensor.  Solution 'Setting the range (A)' on page 23
	The range of the infrared sensor is set too small.	
The flush is too weak.	The shut-off valve is not open far enough.	Open the shut-off valve.
	The flow pressure is too low.	Maximum flow pressure 0.5 MPa (5 bar)
	The flush duration is too short.	Set the flush duration.
		⋄ 'Setting the flush duration (B)' on page 23
	The magnet valve is dirty or damaged.	Clean the magnet valve, replace if required.
		Schapter 3.5.2 'Cleaning the magnet valve' on page 25



Fault	Cause	Solution
The urinal flush runs through after being actuated via the flush plate.	The components have been connected in the wrong order.	Separate the plug connections and wait 10 seconds. Re-connect the magnet valve and then the power supply.
	The magnet valve is dirty or damaged.	Clean the magnet valve, replace if required.
		Schapter 3.5.2 'Cleaning the magnet valve' on page 25
	The control is defective.	Replace the base frame.
The red LED flashes all the time.	The battery is weak.	Replace the battery.

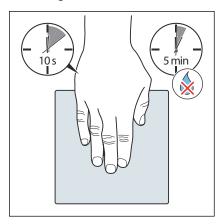
### 3.5 Care and maintenance

## 3.5.1 Care tips

Use normal soap or a mild cleaning agent for regular care and prevention of lime scale on the flush plate. Under no circumstances should scouring agent or scratching objects be used.

Strong stains can be removed using typical household cleaner. Rinse the detergent thoroughly with clear water after the prescribed exposure time. There should be no residue on the components.

#### Cleaning mode



Hold your hand for 10 seconds in front of the flush plate.

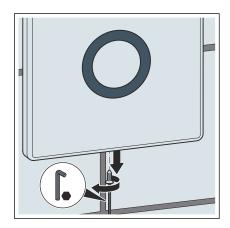
**INFO!** During cleaning mode, the flush plate flashes every second.

No flush is actuated for five minutes.

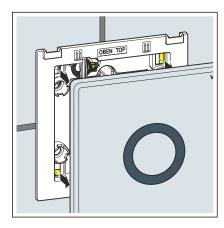
### 3.5.2 Cleaning the magnet valve

Clean the magnet valve if required. Proceed as follows:

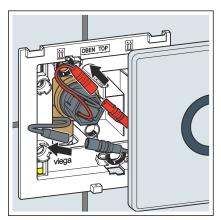




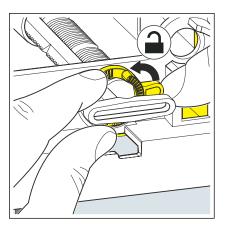
Remove the screw of the flush plate.



Remove the flush plate from the installation frame.

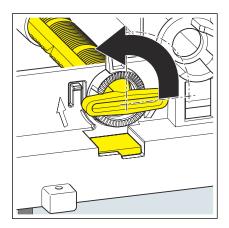


- Disconnect the magnet valve from the control.
- Disconnect the power pack from the control.

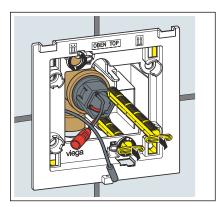


Turn the safety rings 90° anti-clockwise.

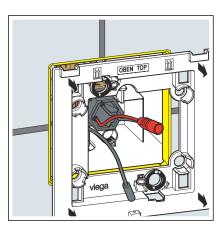




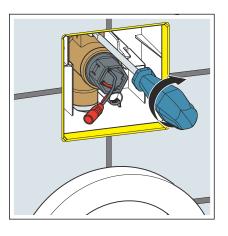
Turn the retaining bolts 90° anti-clockwise.



Turn the sleeve 90° clockwise to unlatch it.

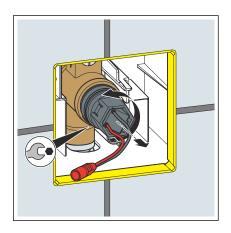


Loosen the installation frame.

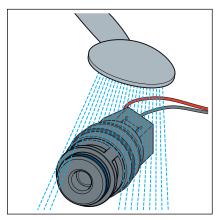


Close the shut-off.



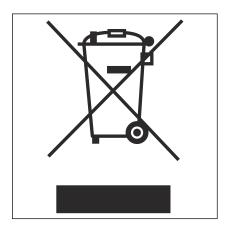


Unscrew the magnet valve.



- Rinse the magnet valve under running water.
  Remove coarse dirt with a soft brush.
- Re-mount the magnet valve and the flush plate in accordance with Chapter 3.2.1 'Inserting the magnet valve' on page 15.

## 3.6 Disposal



Separate the product and packaging materials (e. g. paper, metal, plastic or non-ferrous metals) and dispose of in accordance with valid national legal requirements.

Electronic components and batteries must not be put in the domestic waste but must be disposed of appropriately in conformity with the WEEE guideline 2012/19/EU.



