AquaSense®
ZER-SM Series
Automatic Battery-Powered Flush Valve Retrofit Kit
Installation, Operation, Maintenance and Parts Manual

ZERK-SM

⚠ **WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov
⚠ **ADVERTENCIA:** Cáncer y Daño Reproductivo - www.P65Warnings.ca.gov
⚠ **AVERTISSEMENT:** Cancer et effet nocif sur la reproduction - www.P65Warnings.ca.gov

Specifications

Sensor Range:	12" to 60" (adjustable)
Power Type:	Battery powered; 4x C size
Operating Water Pressure:	25 psi [172 kPa] (Running); 80 Psi [552 kPa] Max (Static)
Operating Temperature:	35°F to 104°F [2°C to 40°C]

Prior to Installation

- Before installing your flush valve, the items listed below should already be installed on-site:

    - Water closet or urinal fixture

    - Fixture carrier
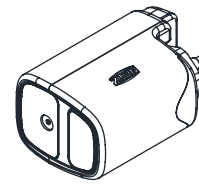
    - Drain line

    - Water supply line

Important Safety Information

- Do not convert or modify this Zurn product. All warranties will be voided.

- All plumbing is to be installed in accordance with applicable codes and regulations.

- Water supply lines must be sized to provide an adequate volume of water for each fixture.

- Flush all water lines prior to making connections.

- Do not use pipe sealant or plumbing grease on any fitting other than the control stop inlet.

- Sensor units should not be located across from each other or in close proximity to highly reflective surfaces.

- Control stop should never be opened to allow flow greater than fixture is capable of evacuating. In the event of valve failure, fixture must be able to handle a continuous flow.
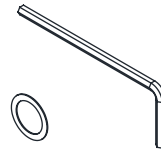
Package Contents

E-Z Flush®

E-Z Flush Wrench

Hex Key and Valve Gasket

E-Z Flush Retrofit Installation

Shut off water supply at stop.

1. Shut off water supply at stop.

2. Using the supplied wrench, loosen handle nut.

3. Remove handle and its valve gasket from flush valve.
   Note: A small amount of water may drip from the port.

4. Place the supplied valve gasket onto the unit as shown. Use one hand to raise the unit to the handle port of the flush valve and use the other hand to rotate the unit's valve nut to begin engaging the threads of the valve body.

5. Use the supplied wrench to tighten the E-Z Flush unit securely to the valve body.

6. Turn on water at the stop valve.

Note: Save handle in the event you wish to reuse for service of E-Z Flush

Valve Nut

Valve Gasket
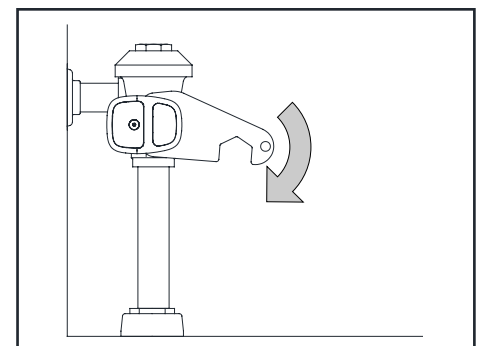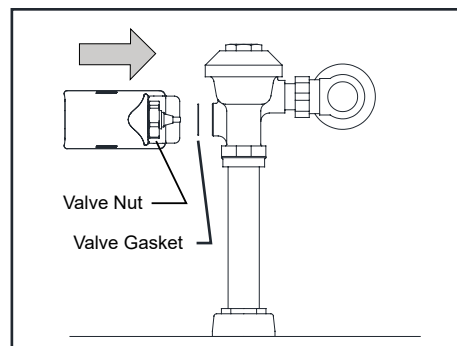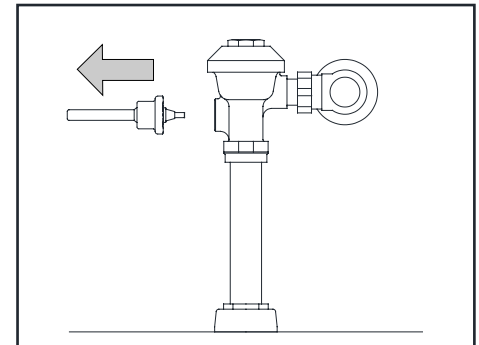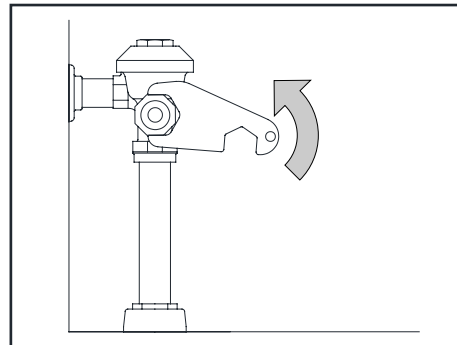
E-Z Flush Activation

Using supplied hex key, remove battery compartment from the E-Z Flush unit.

Load the supplied batteries into the battery tray. Note the battery orientation shown. Reinstall the battery tray into the E-Z Flush unit using the hex key. The user LED will blink when the unit becomes powered.

Notes:

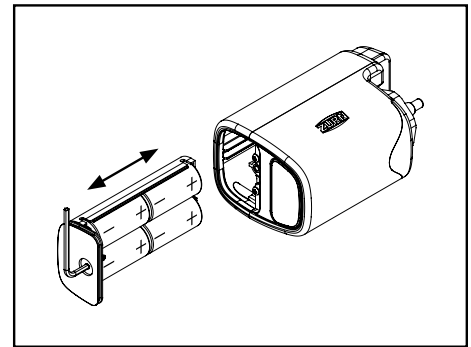Your E-Z Flush unit comes preset from the factory. If special circumstances require adjustment of the activation distance, see section of this manual "Adjusting Calibration Distance".

Each E-Z Flush comes with a 24-hour flush mode that is disabled by default. To toggle this mode, see the section of this manual entitled "Toggling 24-Hour Flush Mode".
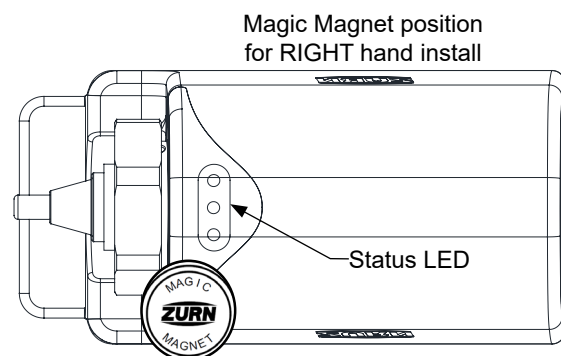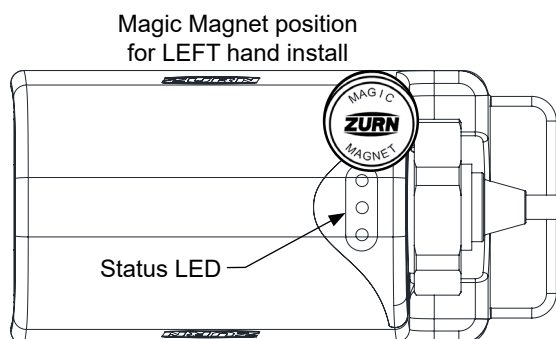
Adjusting Calibration Distance

Each E-Z Flush comes calibrated from the factory to work optimally in most restroom environments. In low light or highly reflective environments however, it may be necessary to adjust the calibration distance of an E-Z Flush unit. To do this, a Zurn Magic Magnet may be used. To re-calibrate an E-Z Flush with a Magic Magnet, follow the procedure below: comes calibrated from the factory. To re-calibrate for a specific environment, follow these steps:

1. Stand at the desired calibration distance:

   - ~28" from the sensor in a water closet application.

   - ~22" from the sensor in a urinal application.

2. Raise the Magic Magnet to the top/bottom (depending on valve orientation - refer to image below) of the unit's lens until the user LED lights up.

3. Hold the Magic Magnet in that position until the user LED begins to blink. Remove the magnet and allow the user LED to blink 10 times while standing in the same position. A quick double-blink signals that the calibration is complete.

4. Test the new calibration distance by walking away from the unit for 5 seconds and returning to the position at which it was calibrated. Watch for the user LED to blink. If the user LED blinks, the calibration distance has been reset successfully.

Note: In water closet applications, it is a good idea to make sure that the new calibration distance does not allow the sensor to see the stall door. To check this, exit the stall and close the stall door for 10 seconds. Open the stall door. If the unit does not flush, the calibration distance is okay. If the unit flushes, you will need to recalibrate to a closer distance.

Magic Magnet position
for LEFT hand install

Status LED

Magic Magnet position
for RIGHT hand install

Status LED

Optional Accessary
Magic Magnet
P6900-AT-MAG

Toggling 24-Hour Flush Mode

Each E-Z Flush comes with a 24-hour auto-flush feature that is disabled by default. This feature is intended for low-use applications where trap seal depletion is a concern. To toggle this feature, follow the procedure below:

1. Raise a Magic Magnet to the top/bottom (depending on valve orientation - refer to image on previous page) until the user LED lights up.
2. Lower the magnet so that the user LED turns off.
3. Repeat this turn on / turn off procedure three more times.
4. After the fourth time, the user LED will display a series of rapid blinks. Three blinks signifies that the feature has been toggled on. Six blinks signifies that the feature has been toggled off.

Flush Valve Trouble Shooting Guide

PROBLEM	CAUSE	SOLUTION
User LED continuously blinks every five seconds.	Low battery life.	Replace batteries.
Insufficient flow of water.	Stop Valve improperly adjusted.	Adjust stop valve (open).
Excessive flow of water.	Stop Valve improperly adjusted.	Adjust stop valve (close).
Continuous flow of water.	Debris clogging flush valve's diaphragm.	Replace diaphragm kit (See section entitled "Repair Parts").
User LED does not blink when user is present.	Calibration distance is set too short. Confirm by placing hand 6" in front of the sensor and watching for a blink. If the user blinks, the calibration is set too short.	Reset calibration to desired distance (See section entitled "Adjusting Calibration Distance").
	Batteries are dead. Confirm by placing hand 6" in front of the sensor and watching for a blink. If the user LED does not blink, the batteries are dead.	Replace batteries.

by **zurn** *ELKAY* Water Solutions