WaterStop Jeweller User manual

Updated June 13, 2023

WaterStop Jeweller is a smart water shutoff valve. Operates as part of an automated water leak prevention system. Controls it in Ajax apps, through a button on the enclosure, a lever on a shutoff valve, as well as automation scenarios.

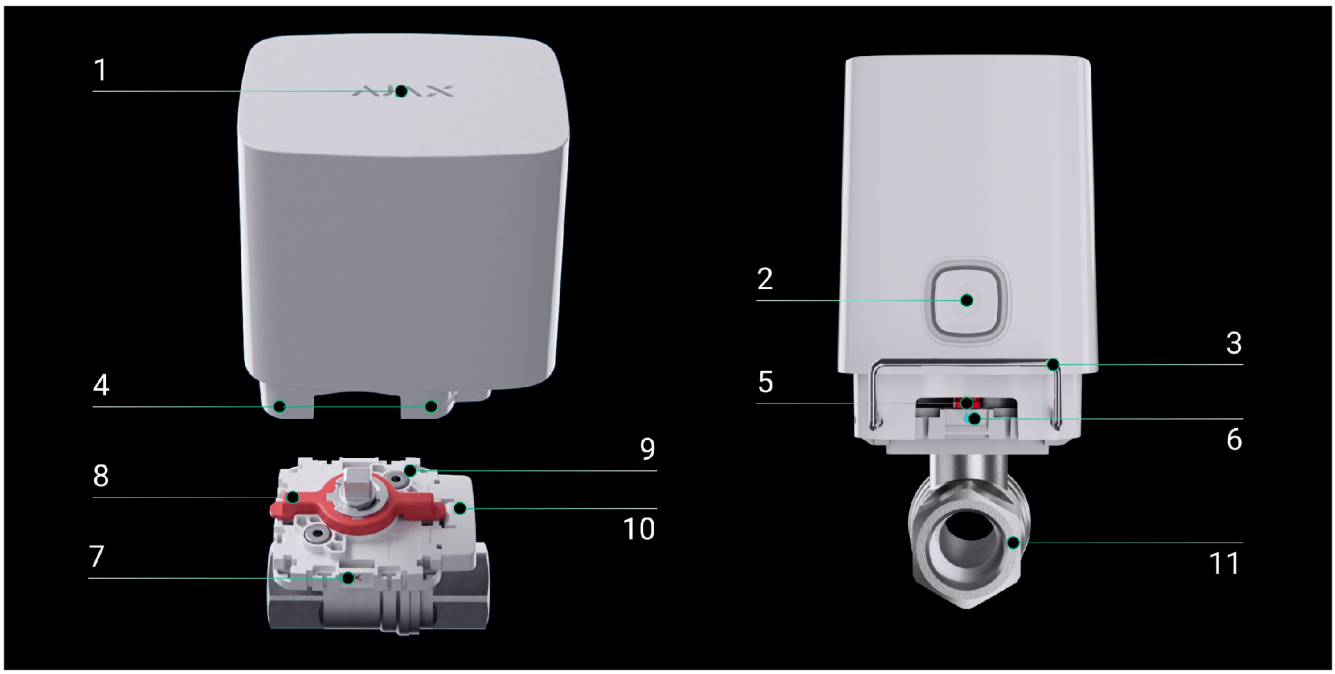
An Ajax hub is required for operation. A list of compatible hubs and range extenders is available here.

WaterStop communicates with the hub using an encrypted **Jeweller** radio protocol. The communication range without obstacles is up to 1,100 meters.

Runs on pre-installed batteries for up to three years. It can also be powered by a third-party power supply unit with 7.5–14 V⎓ and operating current up to 1.8 A.

Buy WaterStop

Functional elements



1. LED indicator. Reports the status of WaterStop.
2. Control button. Activates and deactivates the device when the button is pressed for three seconds. When short pressed (for a second), it controls the water supply.
3. Mounting lockers. Supplied in two options: standard (pre-installed) and anti-sabotage.
4. Holes for installation of a mounting locker. The locker can be installed on any of the four sides of WaterStop.

   Learn more

5. Mechanical indicator of shutoff valve status: **open** or **closed**.
6. Position mark **Open**. The water is open when the mechanical indicator corresponds to this position.
7. Position mark **Closed**. The water is shut off when the mechanical indicator corresponds to this position.

8. Lever on the mount. It is designed for manual control of a shutoff valve.
9. Mounting platform. It is installed between the shutoff valve and the electric drive.
10. Removable part of the mount. Allows changing the position of the electric valve by 180° without removing the mount.
11. Bonomi Industries shutoff valve. WaterStop is supplied with a valve in one of three sizes: ½” (DN 15, 15 mm), ¾” (DN 20, 20 mm), or 1" (DN 25, 25 mm).

12. **Tamper button**. Reacts to the removal of the electric actuator from the mount.
13. QR code and ID/serial number of the device. It is used to connect WaterStop to the Ajax system.
14. The rotary part of the water shutoff mechanism (electric actuator coupling).
15. Plug for a third-party 7.5–14 V⎓ power supply connection.

Operating principle

any time.

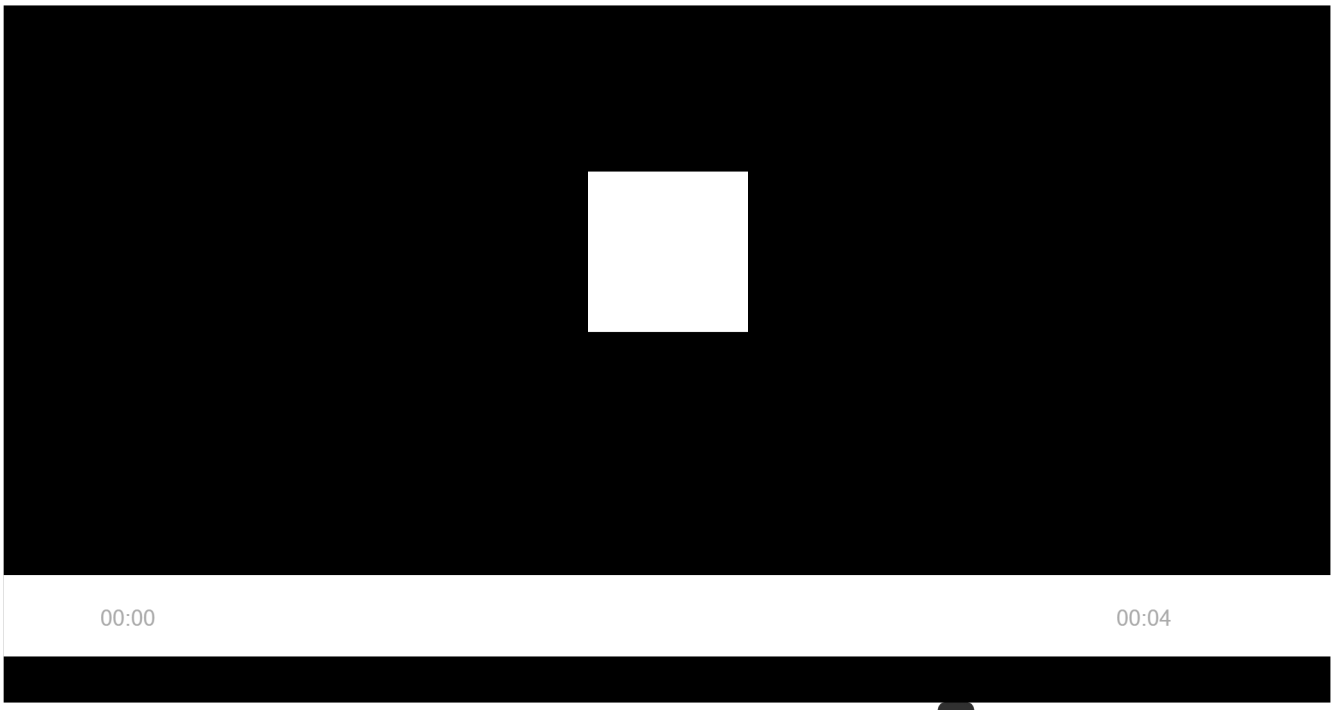
WaterStop consists of the following blocks:

1. The electric actuator controls the shutoff valve.
2. The shutoff valve is a Bonomi Industries ball valve. WaterStop is supplied with a valve in one of three sizes: ½” (DN 15, 15 mm), ¾” (DN 20, 20 mm), or 1" (DN 25, 25 mm).
3. The mount is installed between the shutoff valve and the electric actuator.
4. The mounting locker fixes the electric actuator on the shutoff valve. There are two options: standard (pre-installed) and anti-sabotage (for installation in public places).

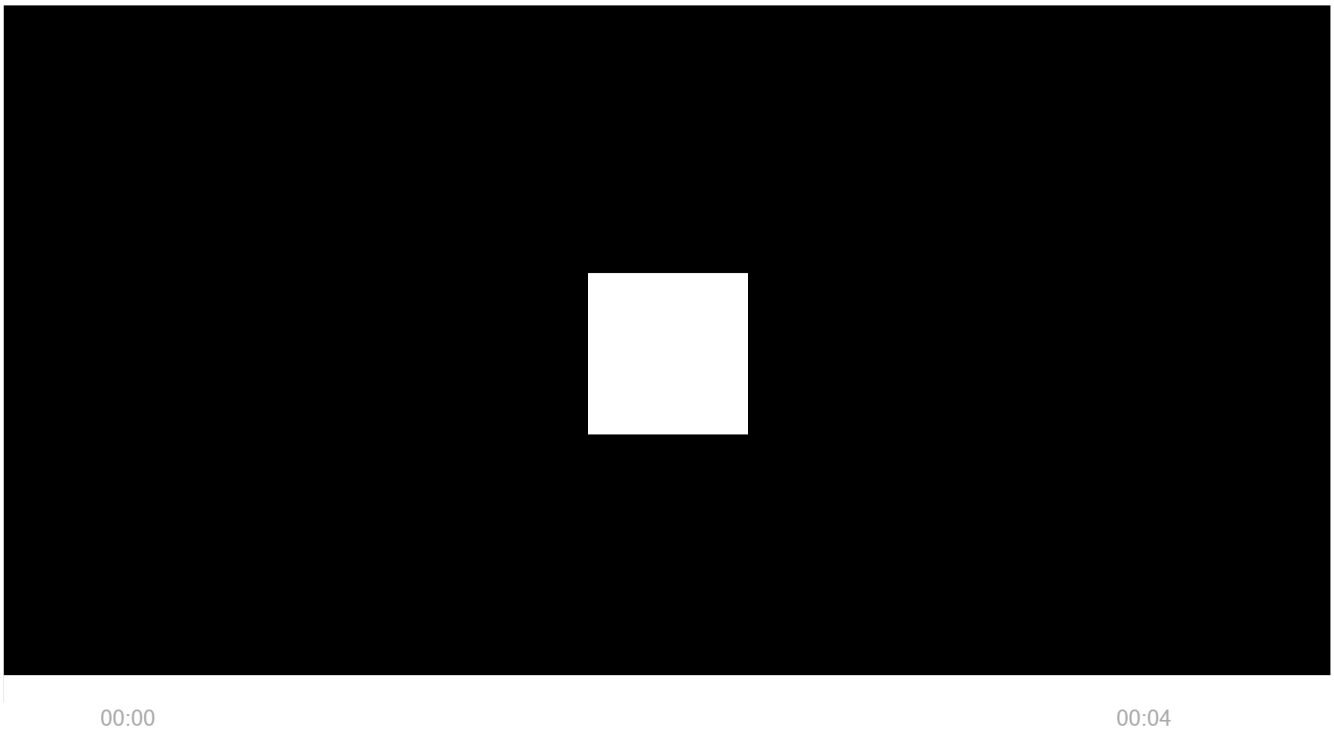
Learn more

Control via the app

WaterStop can control the water supply at the object using **Ajax apps**. Notifications indicate the device’s name, a virtual room, activation time, and the user who opened or shut off the water supply.



By clicking the toggle in the WaterStop field in the **Devices** menu of Ajax apps, the state of the valve contacts changes to the opposite, and the water supply will stop or restore. Thus, a user can, for example, remotely shut off the water in a country house.

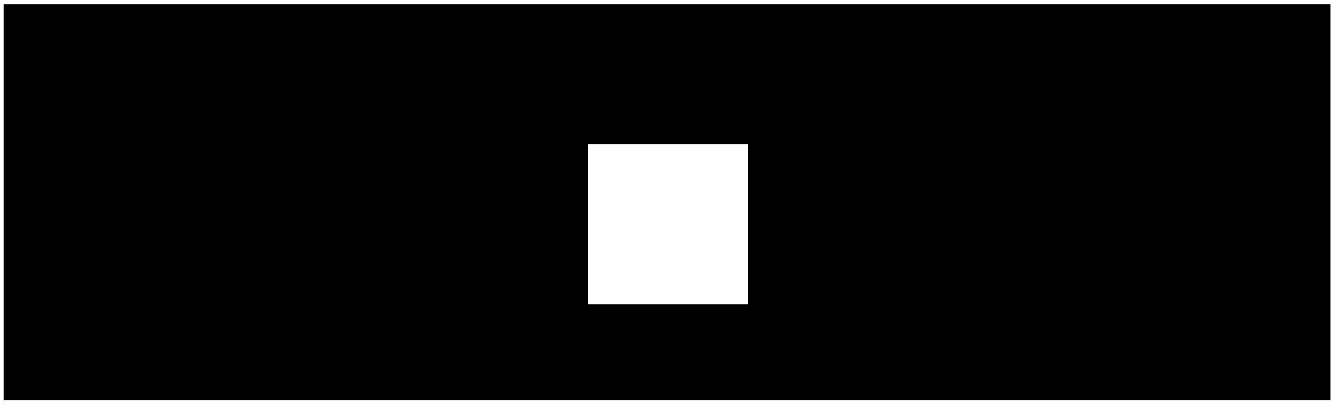


Users can also control the water supply in the **Control** menu. To do this, a user must swipe up the **Control** menu. A swipe opens a list of automation devices connected to the hub. The valve state reverses by pressing the switch in the WaterStop field, and the water supply stops or restores.

More about Ajax apps

Manual control

Users can control the water supply at the object in Ajax apps and manually. There are two ways to control WaterStop manually: a button on the electric actuator enclosure and a lever on the mount.



1. **By button on the electric actuator enclosure**. When pressed, the shutoff valve opens/closes. This method of water supply control works when the electric actuator is already installed. The state of the shutoff valve can be found in Ajax app and by looking at the position of the mechanical indicator.

> The ability to control the water supply with a button on the enclosure can be disabled in the device settings.

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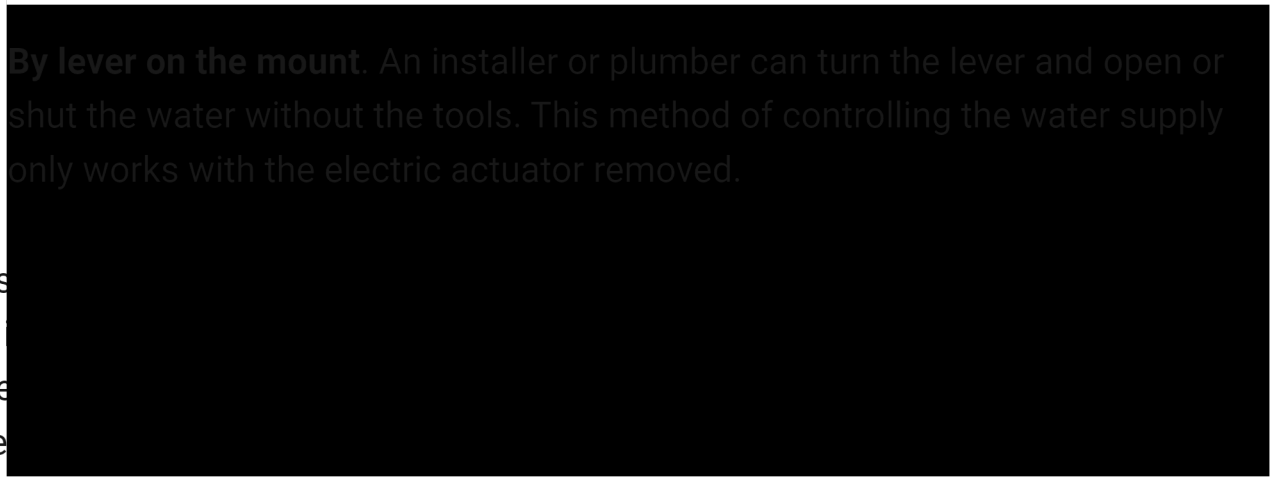
2. **By lever on the mount**. An installer or plumber can turn the lever and open or shut the water without the tools. This method of controlling the water supply only works with the electric actuator removed.



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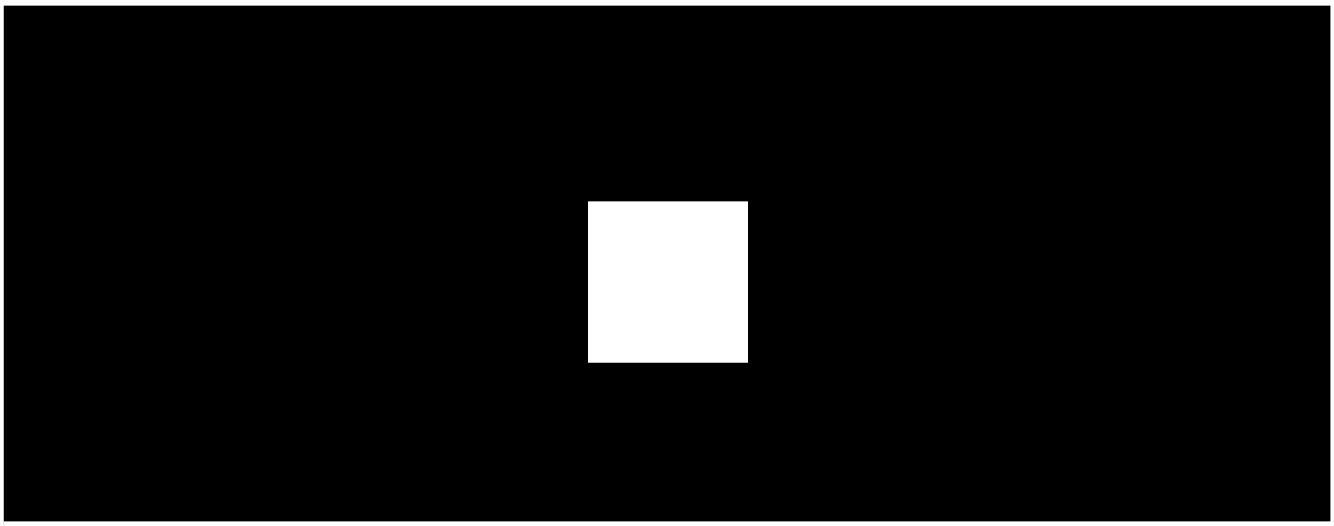
Automation scenarios



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Security system scenarios help automate security, reduce the number of routine actions, and improve user experience. WaterStop supports the following types of scenarios:

- **Alarm reactions.**
- **Security mode change responses.**
- **Scheduled actions.**
- **By pressing Button.**
- **Temperature protection.**

- **By pressing LightSwitch.**
- **By humidity.**
- **By CO_2 concentration.**

Scenarios by humidity and CO_2 concentration are available when LifeQuality is added to the system.

For example, using scenarios, the water supply can be turned off by the **LeaksProtect** leak detector alarms, according to a schedule, or when the security system is armed.

More about scenarios

Out of range temperature notification

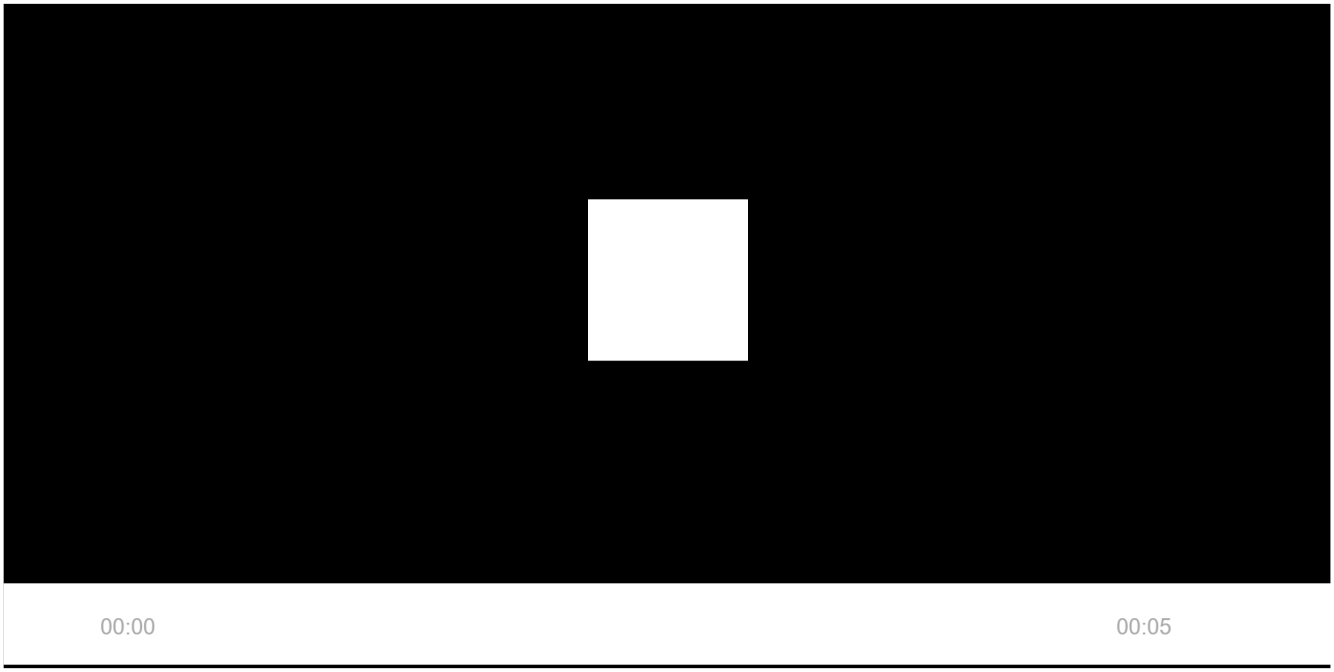
To prevent overheating, WaterStop notifies you when it heats up to +60°C.

The notification is sent to both end-user apps and PRO Desktop. Thus, not only users but also representatives of service companies can monitor the status of devices at the objects. The option does not affect the WaterStop main task to shut off the water.

The notification is also sent to Ajax apps when the device temperature returns to normal.

To avoid overheating, we recommend installing WaterStop in a ventilated area. If the device temperature tops +60°C, we suggest changing the device installation site and operating conditions.

Stuck prevention

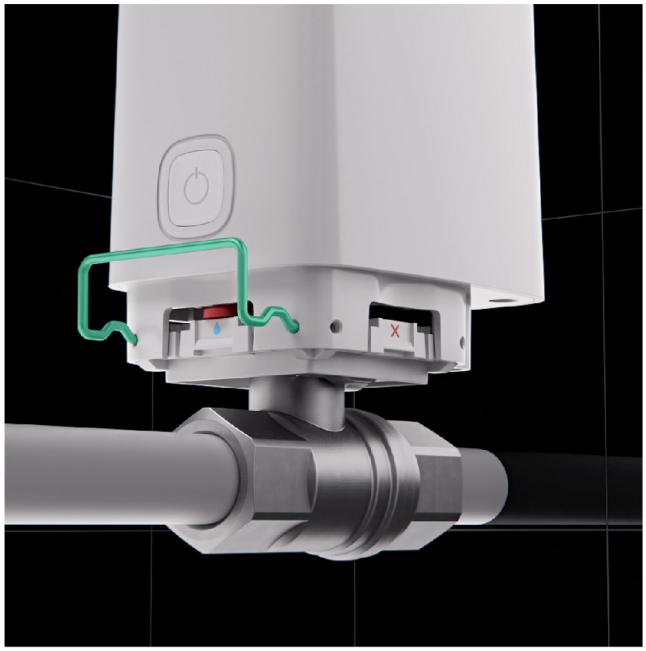


The ball shutoff valve should be serviced for stuck prevention. Without this procedure, a thick layer of limescale can form inside the valve over time. This deposit can impair or block the ability to turn the ball valve. As a result, it will be impossible to control the water supply at the object.

For stuck prevention, WaterStop can periodically open and close the shutoff valve. A PRO or a user with admin rights can set the maintenance period by creating a scheduled scenario.

Learn more about scenarios

Protected with a tamper switch against unauthorized dismantling



Standard mounting locker

Anti-sabotage mounting locker

The WaterStop kit includes two lockers:

- **Standard (pre-installed) locker** — for quick fixing of the electric drive on the shutoff valve. It is easily removed to access a shutoff valve or replace the electric actuator.
- **Anti-sabotage locker** — installed instead of the WaterStop's standard locker. Use the tools to remove the anti-sabotage locker. The anti-sabotage locker securely fixes the electric actuator on the valve and makes it harder to remove the electric actuator if someone tries it unauthorized. This locker is used, for example, when installing the device in cafes, restaurants, hotels, factories, or public access sites.

Regardless of the selected locker, WaterStop tamper will notify users and the monitoring company that the tamper has been triggered during an attempt to remove the electric actuator from the ball valve.

The locker can be installed on any of the four sides of WaterStop.