

WaterStop

Remotely controlled water shutoff valve

Not a drop of problems

WaterStop automatically shuts off the water in 7 seconds at a facility with an Ajax security system if LeaksProtect or a third-party water leak detector is triggered. The device combines a high-quality valve and a powerful electric actuator. You can control WaterStop and check its status from anywhere in the world – all you need is an Internet connection and an Ajax app. You can also create a scenario to shut the water off at a specific time or when arming the system.

4 mounting positions	Compatible with cold and hot water pipes	Electric actuator protection against unauthorized dismantling
Water shut-off in 7 seconds	Jeweller radio communication <ul style="list-style-type: none"> ● Two-way communication ● TDMA ● Encryption ● Frequency hopping ● Power adjustment 	Button and lever to shut off the water manually
Bonomi Industries valve ½, ¾ or 1" included ISO 5211 standard	Mounting the electric actuator without additional tools	Informative in-app notifications <hr/> Notifies about overheating
Up to 1,100 m range of communication with an Ajax hub	Automatic stuck prevention with scenarios	Remote control and configuration
Up to 3 years of battery life	Automation scenarios	Optional external power supply 9-12 V _{DC}

Compatible hubs and range extenders

Hub Plus Hub 2 (2G) Hub 2 (4G) Hub 2 Plus Hub Hybrid (2G) Hub Hybrid (4G)	ReX ReX 2
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Wherever there is a risk of water leak

Private residence

Be sure that your home is under the care of Ajax. WaterStop shuts off the water supply when necessary. In an emergency, users and the security company are instantly aware of the water leak at the premises. Forget all your worries about property damage with in-app control and automation scenarios.

Public space

In offices, libraries, or malls, the network of leak detectors and shutoff valves will help eliminate flooding and prevent high-cost consequences. The incident can be localized without disturbing the comfort of employees and visitors. The management will know exactly when and where the water leak happened to request the plumbing and cleaning services and navigate them to the scene.

Industrial premises

An Ajax system can control up to 200 leak detectors and shutoff valves. With the technologies of long-range wireless communication and outstanding battery life, it is easy to build a large water leak prevention network covering massive industrial facilities. Every leak can be eliminated and localized automatically without stopping production.

Water shut-off in 7 seconds

WaterStop is equipped with a powerful actuator of **up to 8.5 N•m torque**. This is enough to shut off even a stuck-up valve without the risk of damaging it. Under normal operating conditions, WaterStop shuts off the water **in 7 seconds** after the command or automatically by scenario whenever **LeaksProtect** or a third-party sensor detects flooding. In a setting with a ¾-inch pipe and 2.5 bar of pressure in the water supply system, less than 1 liter of water will leak out.

Inside the water leak prevention system based on Ajax, every device operates either on pre-installed batteries or has a backup power supply in case of a blackout. The system monitors the facility **24/7**, giving you complete peace of mind that the property is protected.

- Shuts even a stuck-up valve
- Suitable for facilities with unstable or no power supply

Protected on every level

WaterStop is suitable for controlling both hot and cold water supplies and is ready to operate in challenging environments. With additional protection, WaterStop withstands overcurrent and notifies about overheating, making it impossible for the electric actuator to fail even when the shutoff valve is stuck.

- Overheating notification
- Overcurrent protection

One-stop solid brassware

WaterStop is available in three versions with different valve options: ½" (DN 15), ¾" (DN 20), or 1" (DN 25). Those are the most common sizes used to cover any demand, from residential to business facilities. Also, the WaterStop electric actuator is compatible with all ball valves that meet the **ISO 5211** standard. So when it comes to specific tasks and sizes, a plumber installs an available on every market compatible valve, and the installation engineer easily connects the electric actuator.

Bonomi Industries shutoff valve

The WaterStop complete set includes a **Bonomi Industries** shutoff valve by **IDROSANITARIA BONOMI Industries S.P.A.** – a proven Italian plumbing manufacturer. Bonomi Industries has specialized in designing and producing components for the plumbing sector since 1908. With extensive expertise and superior quality, now it's a field-leading plumbing manufacturer trusted by millions of professionals worldwide.

Installation without any construction involved

The myth about anti-flood systems being difficult to install is busted. Ajax minimized an expensive, long, and dusty experience for clients and professionals. Cutting-edge hardware and software engineering allowed us to implement advanced capabilities with significant autonomy in a compact size. Miniature Ajax water leak detectors suit hard-to-reach places and do not require enclosure disassembling – they can be installed on a horizontal surface without attaching. The shutoff valve is installed in line with an existing plumbing system. The actuator unit does not require wires and fits limited spaces, having four possible installation positions towards the valve.

Stable performance for years

Batteries

No additional cable routing is required: WaterStop is autonomous and does not depend on the 110 or 220 V~ grid. With a 3-year battery life and no wires, the installation process takes much less time and effort. Ajax apps will notify an installation engineer and users about the low battery level in advance. The batteries are replaceable – so after three years, the installer pops the new ones, and WaterStop continues to operate as usual.

- Up to 3 years of operation with pre-installed batteries
- In-app low battery warning
- Replaceable CR123A batteries

External power supply

When a constant shut-off valve operation is required or the installation place uses extreme temperatures, the batteries can discharge faster. An option to connect a 9–12 V= power

supply will come in handy, eliminating frequent battery replacement and reducing service costs. And the pre-installed batteries will serve as a backup, so even in a power outage WaterStop continues to operate without any problem.

- 9–12 V= power supply connection
- Pre-installed batteries as a backup power source

9–12 V= power supply unit is not included in the WaterStop complete set.

Unique wireless technologies

The Ajax system uses two-way secure radio communication based on **Jeweller** proprietary protocol. It supports block cipher encryption and device authentication on every session with the hub to prevent sabotage, spoofing, or data theft.

Ajax wireless technology has **up to 1,100 meters** of radio signal communication range in an open space, making it on average longer than competing solutions from different manufacturers. Automatic power adjustment makes it energy efficient by not using the maximum power of radio transmitters in system devices on a regular basis. It is also more stable, using less noisy radio frequencies. For protection against radio interference and signal interception, Ajax hubs use frequency hopping: the system automatically changes frequency within a band and notifies the security company and users about the jamming.

- Up to 1,100 meters of radio communication range with a hub
- Encrypted two-way radio communication
- Notifications about jamming and connection loss

Jeweller

Jeweller uses polling to display the real-time device status and transmits alarms, events, and all measured readings into the Ajax apps. Features encryption and authentication to prevent spoofing.

Scaled and comprehensive

Use the ReX range extender for complex radio signal conditions like large houses with thick walls or warehouses with several buildings. **ReX boosts the range** of all Ajax devices and manages their communication with the hub via Jeweller. And **ReX 2** assures stable communication even through steel and concrete via **Ethernet** using the wire as the additional communication channel. Up to 5 range extenders can operate within one Ajax system to expand the network twice as big, covering underground parking, basements, and metal hangars.

- Up to 5 range extenders within one system
- Ethernet as an alternative communication channel

All data at a glance

In-app control

Intuitive Ajax apps provide all information in real-time from anywhere the Internet is available, on a smartphone or PC. Users can check the device state and control the water supply remotely – any action can be done with one click.

Data-rich notifications

The Ajax system instantly notifies about events with informative notifications: security companies and users know exactly which device triggered, when and where it happened. The system controls each device state and reports if there is a malfunction or if it's time to replace the batteries.

Remote configuration

WaterStop can be configured at any time from anywhere, as long as there is an Internet connection. It takes seconds to change the settings or reconfigure the scenario.

Detailed event log

The event log records 500 recent events within the system. The data is explicit with the device, time, and description of the event. It helps to reconstruct the actual event and find the causes to obtain comprehensive information for the insurance company.

Full monitoring for the building

With PRO Desktop, building admin staff can observe security, automation, and smart home devices. Device statuses, event log, and microclimate data – the operator has a complete picture in one intuitive interface, all informative and centralized. And photo verification of alarms from detectors of the MotionCam lineup will help to find out the situation at the

protected facility and quickly respond to it. The installer can remotely change the settings and provide additional services according to the object specifics.

Advanced automation for greater safety

WaterStop is a part of the Ajax ecosystem. Using **scenarios**, it can interact with automation devices and PhOD detectors of the MotionCam lineup. Whether it's a minor water leak or a massive flooding, WaterStop shuts off the water in a matter of seconds. At the same time, MotionCam (PhOD) sends pictures to Ajax apps to identify what causes the water leak and assess the possible damage. And to prevent emergencies, automatic water supply control will turn off the water when no one is using it – a reliable combination of security and automation that runs like a Swiss watch.

Water leak prevention system

WaterStop automatically shuts off the water when LeaksProtect or any other third-party leak detector integrated into Ajax via **Transmitter** or **MultiTransmitter** detects a water leak.

Water leak > LeaksProtect > WaterStop

Water shut-off when changing the security mode

WaterStop automatically shuts off the water when you arm the system. Be sure that there will be no water leaks at the facility when you're away.

Arming > WaterStop

Scheduled water supply

Adjust a schedule, and WaterStop will automatically turn off the water supply at a particular time.

Schedule > WaterStop

Sabotage-resistant

Communication failure detection

The device regularly exchanges data with the hub. With maximum ping interval settings available (3 data packages once in 12 seconds), it takes only **36 seconds** to identify communication loss and notify the security company and users about the incident.

Tamper alarm

The enclosure is hardwired with a tamper button, which notifies the security company and users once the electric actuator is dismantled from the mount. Also, it helps to incur that the electric actuator is installed and fixed on the shutoff valve correctly.

Anti-sabotage mount lockers

Anti-sabotage mount locker prevents the electric actuator from dismantling unauthorized unless special tools are used. So WaterStop can be installed in offices, restaurants, libraries, and other public places without worries.

Control button locking

The control button on the enclosure can be locked in Ajax apps to prevent accidental or unauthorized manual shut-offs.

Intuitive installation and connection

The WaterStop actuator is ready to operate straight out of the box. It installs on the mounting platform without tools and enclosure disassembling in four possible positions towards the valve. A plumber installs a bundled or another compatible shutoff valve in advance without an installation engineer's presence — all he needs to know is the electric actuator dimensions.

Ajax apps help quickly make the device a part of the automated system. There is no need to

visit the object to disable the device or change the settings. The design allows maintenance and repair in hard-to-reach places: pipe tunnels, technical boxes, walls, etc. It is possible to replace the actuator unit without dismantling the shutoff valve.

Connection

Pairing with the security system via QR code

Installation

Installation on a shut-off valve without disassembling the enclosure of the electric actuator

Setup

Configuring and testing in mobile and desktop apps