

# Gas/Water Shut-Off Controller Manual



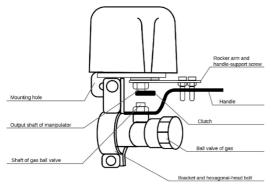


# **Gas/Water Shut-Off Controller - Manual**

Quick Start	2
Product Description	
Installation Guidelines	
Behavior within the Z-Wave Network	
Operating the Device	
Node Information Frame	
Technical Data	
Explanation of Z-Wave specific Terms	
Support	

## **Quick Start**

This device is a Z-Wave actuator. To include the device, press the red inclusion button on the upper front side 3 times. During includes/excludes it is suggested to keep the device within a distance to the controller less than 1 meter. The two screws must be shut off before include/exclude.



## **Product Description**

Flow Stop is a motor operated shut-off controller for automatic flow stop of gas and water pipes. It is equipped with Z-Wave technology. The Flow Stop is driven by a motor and closes the ball valve mechanically. Even though the Motor requires only 12 Volt (1A), it has a high power output as well as high torque, which reliably closes the ball valve in just 10 seconds. Also a manual closing of valve is easily possible in case of power failure – thanks to the clutch release bearing.

Thanks to the "Flow Stop", the water supply can

be stopped automatically in the event of overflowing bathtubs, leaking washing machines or defects to water pipelines. This also refers to a gas leak. In this way the Flow Stop is protecting against water and consequential damages reliably.

### **Installation Guidelines**

The POPP Flow Stop is delivered completely including valve control/motor, power supply, mounting and Quick Start Guide and is easy to assembly on the existing ball stop valve. In doing so, all usual pipe standards, including  $\frac{1}{2}$  " and  $\frac{3}{4}$ ", are possible. On this occasion no pipes must be dismantled or even water must be drained. That way the installation is normally done in 5-10 minutes.

#### For ductwork user

The main ball valve should be designed and installed to the place as much as convenient for manual opening and closing. The flow stop shut-off controller should keep 20 mm away from the wall.

 Install the Popp Flow Stop to the ball valve with two semicircular brackets which griped the pipe, and another and fix the mounting hole of the manipulator.

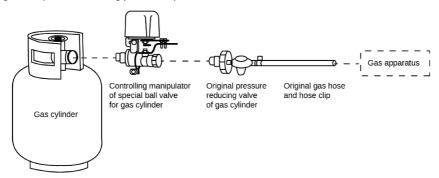
- 2. Make the bracket with the screw thread in the guide-bar side of the mounting hole by tightening two M6\*16 hexagonal-head bolts into the two bolt holes at both ends of the bracket for initial installation, but fix them loosely. Put two rocker arm screw bolts symmetrically to the both sides of the valve handle and tighten two M4 nuts using cross screw driver and 7# spanner.
- Adjust the three-dimensional position of the bracket to make a coaxial line between the output shaft
  of the manipulator and the center line of the valve, and then tighten two M6\*16 hexagonal-head
  screws using the 10# fork wrench or box wrench (the socket wrench preferred).

The manipulator could connect ductwork directly, instead of the rocket arm, for connection to the output shaft of the device and the gas ball valve.

To include the device, press the red inclusion button on the upper front side 3 times. During includes/excludes it is suggested to keep the device within a distance to the controller less than 1 meter. The two screws must be shut off before include/exclude.

#### For bottled gas user

To connect bottled gas, the user uninstall the original pressure reducing valve and install the manipulator with the special ball valve for the pipe between the original angle valve and pressure reducing valve, and then tighten it. (See the following procedures)



#### **Behavior within the Z-Wave Network**

On factory default the device does not belong to any Z-Wave network. The device needs to join an existing wireless network to communicate with the devices of this network. This process is called **Inclusion**. Devices can also leave a network. This process is called **Exclusion**. Both processes are initiated by the primary controller of the Z-Wave network. This controller will be turned into exclusion respective inclusion mode. Please refer to your primary controller's manual on how to turn your controller in inclusion or exclusion mode. Only if the primary controller is in inclusion or exclusion mode, this device can join or leave the network. Leaving the network – i.e. being excluded – sets the device back to factory default. **For inclusion/exclusion press the red inclusion button 3 times**.

# **Operating the Device**

The Flow Stop can open or shut ball valves at command. Furthermore it sends its status (open/closed) to the controller.

In case of alarm failure, overhaul or power cut:

- pull out the tab of clutch and keep,
- 2. manually turn the handle to the end point until move smoothly,
- 3. release the tab, and then gently move the handle to make the clutch back to its original position.

The Flow Stop is also applicable to automatic control of other gas or fluid valves.

#### **Node Information Frame**

The Node Information Frame is the business card of a Z-Wave device. It contains information about the device type and the technical capabilities. The inclusion and exclusion of the device is confirmed by sending out a Node Information Frame. Beside this it may be needed for certain network operations to send out a Node Information Frame.

Every click on the red inclusion button issues a Node Information Frame.

#### **Technical Data**

Voltage	12 V, 1 A
Frequency	868.42 MHz (SRD Band)
Wireless Range	Up to 30 m outside
Valve Pressure	1.6 Mpa
Valve size	1/2", 3/4", 1", 1.25", 1.5"
Auto Close Time	5~10 seconds
Auto Open Time	5~10 seconds
Torque	30~60 Kg.cm

## **Explanation of Z-Wave specific Terms**

- Controller is a Z-Wave device with capabilities to manage the network. Controllers are typically gateways, remote controls or battery operated wall controllers.
- Slave is a Z-Wave device without capabilities to manage the network. Slaves can be sensors, actuators and
  even remote controls.
- **Primary Controller** is the central organizer of the network. It must be a controller. There can be only one primary controller in a Z-Wave network.
- Inclusion is the process of bringing new Z-Wave devices into a network.
- Exclusion is the process of removing Z-Wave devices from the network.
- Association is a control relationship between a controlling device and a controlled device.
- Wake up Notification is a special wireless message issued by a Z-Wave device to announce that is able to communicate.
- Node Information Frame is a special wireless message issued by a Z-Wave device to announce its capabilities and functions.

## **Support**

Should you encounter any problem, please give us an opportunity to address it before returning this product. Most questions regarding Z-Wave wireless communication standard can be answered through the international community at <a href="https://www.z-wave.info">www.z-wave.info</a>.

If your question can't be answered there, please contact us by email: info@popp.eu

#### © 2015 POPP & Co.

While the information in this manual has been compiled with great care, it may not be deemed an assurance of product characteristics. Popp & Co. shall be liable only to the degree specified in the terms of sale and delivery.

The reproduction and distribution of the documentation and software supplied with this product and the use of its contents is subject to written authorization from Popp & Co. We reserve the right to make any alterations that arise as the result of technical development.

Phone: +44 (0) 20 7419 5726

eMail: info@popp.eu Web: www.popp.eu