

Installation Instructions

Flood Sensor Upgrade for Building Management Systems

Series 009, LF009, LFU009, SS009, U009

1/2" – 3"

Series LF909

3/4" – 2"

⚠ WARNING



Read this Manual BEFORE using this equipment.

Failure to read and follow all safety and use information can result in death, serious personal injury, property damage, or damage to the equipment. Keep this Manual for future reference.

⚠ WARNING

You are required to consult the local building and plumbing codes prior to installation. If the information in this manual is not consistent with local building or plumbing codes, the local codes should be followed. Inquire with governing authorities for additional local requirements.

NOTICE

Use of the SentryPlus Alert® technology does not replace the need to comply with all required instructions, codes, and regulations related to the installation, operation, and maintenance of the backflow preventer to which it is attached, including the need to provide proper drainage in the event of a discharge.

Watts is not responsible for the failure of alerts due to connectivity issues, power outages, or improper installation.



Monitor relief valve discharge with smart and connected technology to detect and notify of flooding. When a qualifying relief valve discharge occurs, the flood sensor energizes a relay signaling flood detection and triggers real-time notification of potential flood conditions through the building management system.



Components Needed

You need the appropriate-sized flood sensor for your valve assembly and activation module with conductor cable, power adapter, and ground wire. If you need help obtaining any component, speak with your account representative.



Activation module with 8' conductor cable



Flood sensor with captive screw, valve sizes $\frac{1}{2}$ " to $\frac{3}{4}$ "



24V DC power adapter (requires a 120VAC, 60Hz, GFI-protected electrical outlet)



Flood sensor and 2 mounting bolts, valve sizes 1" to 1 $\frac{1}{2}$ "



Ground wire



Flood sensor and 2 sets of mounting bolts, valve sizes 2" to 3" (larger bolts for LF009 2 $\frac{1}{2}$ " to 3" only)

Requirements

- #2 Phillips screwdriver
- $\frac{3}{16}$ " Allen wrench
- $\frac{1}{2}$ " Wrench
- Power source, ranging from 12V to 24V
- Wire stripper

NOTICE

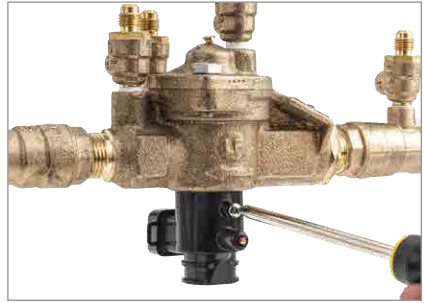
When installing an air gap, attach the air gap brackets directly onto the flood sensor.

The flood sensor is not intended for use in vertical installations. Horizontal placement is required.

Installing the Flood Sensor

On Series 009, sizes $\frac{1}{2}$ " to $\frac{3}{4}$ ", install the flood sensor with the interface front facing by securing the captive screw to the back side of the valve.

Series 009, sizes $\frac{1}{2}$ " – $\frac{3}{4}$ "



1. Position the flood sensor on the relief valve with the sensor interface front and the captive screw rear.

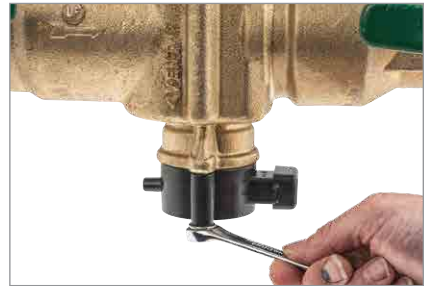
2. Use a #2 Phillips screwdriver to tighten the captive screw.

IMPORTANT! On Series 009, sizes 1" to 3", and Series 909, sizes $\frac{3}{4}$ " to 2", install the flood sensor with the interface pointing in the same direction as the valve flow arrow.

Series 009, sizes 1" – 3"; Series 909, sizes $\frac{3}{4}$ " – 2"



1. Position the flood sensor on the relief valve and insert the two mounting bolts.



2. Tighten the bolts to secure the deflector and the flood sensor. Do not overtighten.

- For Series 009 sizes 1" to 1 $\frac{1}{2}$ " and Series 909 sizes $\frac{3}{4}$ " to 1", use a $\frac{3}{16}$ " Allen wrench.
- For Series 009 sizes 2" to 3" and Series 909 sizes 1 $\frac{1}{4}$ " to 2", use a $\frac{1}{2}$ " wrench.

Mounting the Activation Module

The activation module receives a signal from the flood sensor when a discharge is detected. If the discharge meets the conditions of a qualifying event, the normally open contact is closed to provide a signal to the BMS input terminal.

Custom Flood Sensor Settings

Activation module switch settings can be customized to specify the wet threshold (sensitivity to water discharge) and the timer delay (duration before alarm). Scan the QR code for more information.



1. Remove the dust cover from the flood sensor.



2. Press the activation module with cable on to the flood sensor.

NOTICE

Retain the dust cover to protect the flood sensor during temporary instances when the activation module may need to be removed or replaced.



3. Check that the activation module is seated securely on the flood sensor.

Linking the Activation Module Cable to the BMS Controller

The 4-conductor activation module cable should be attached to the BMS controller to transmit a normally open contact signal and provide power to the activation module. The contact signal closes when a discharge is detected.

Wire the cable to the controller

1. Use the wire stripper to cut away enough insulation to expose 1 to 2 inches of the conductor wires.
2. Insert the white and green wires into the input terminal.

NOTICE

Either the BMS power source (ranging from 12V to 24V) or the 24V DC power adapter provided can be used. With each power source, an earth ground connection is required.

If using the optional power adapter, skip to the next set of instructions. Be sure to use the ground wire provided if there is no other earth ground on the BMS controller.

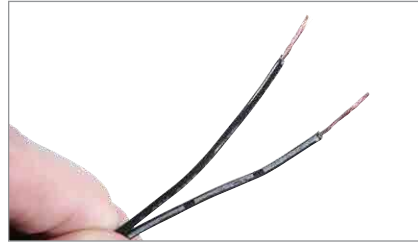
3. Insert the red wire in the power terminal.
(A power source ranging from 12V to 24V is required.)
4. Insert the black wire in the ground terminal.

⚠ WARNING

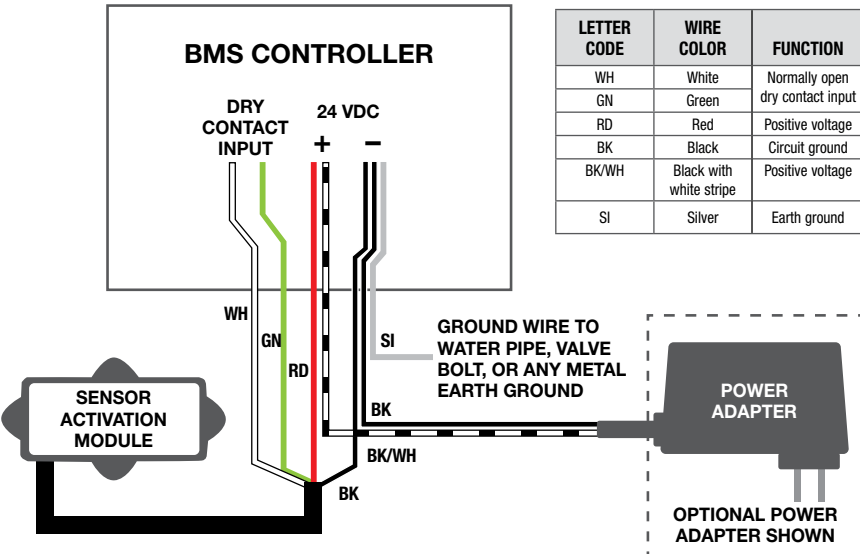
The earth ground must be connected to the BMS controller before the flood sensor is put in operation.

Use the 24V DC power adapter (optional)

Distinguish the positive wire from the negative one. The positive wire has white stripes and must be inserted into the power terminal; the negative wire, into the ground terminal.



1. Connect the positive power adapter wire (black with white stripe) to the red wire of the activation module cable and insert the wires into the power terminal.
2. Connect the negative power adapter wire (black with no stripe) to both the black wire of the activation module cable and the ground wire (if needed) then insert the wires into the ground terminal.
3. Plug the power adapter into a 120VAC, 60Hz, GFI-protected electrical outlet.
4. The flood sensor LED is steady green when the unit is ready.



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