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SentryPlus Alert™

Universal Upgrade Kit

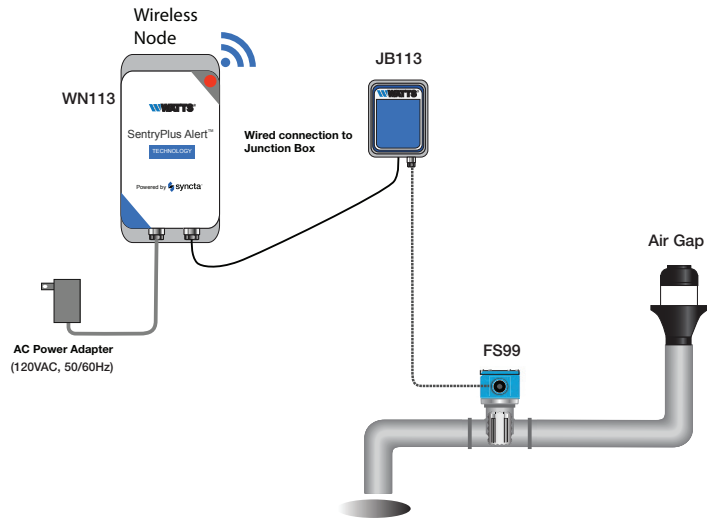
Flood detection and wireless alerts for RPZ backflow preventer installations

The SentryPlus Alert Universal Upgrade Kit is an ideal solution to upgrade existing RPZ backflow preventer and/or LFF113FP ACV installations to include SentryPlus Alert detection and wireless alert technology. The upgrade can be done in-line without any removal of existing valves already installed.

- Detects continuous water discharge from RPZ Backflow
- SentryPlus Alert™ wirelessly alerts user via text, call or email.
- Can be used to upgrade any existing RPZ backflow preventer installation
- Installed on relief valve discharge line of Reduced Pressure Zone Backflow Preventer
- Uses cellular signal for alerts
- Wireless node can be placed up to 100ft from unit

Contents

- Electronics Junction Box (JB113)
- Wireless Node (WN113)
- Flow Sensor (FS99) – Included with EDP code 0113134 only
- 2" Tee (PVC) with NPTF threaded end connections (To mount FS99) - included with EDP code 0113134 only



**Air gap and piping not included*

ORDERING CODE	DESCRIPTION
0113135	For existing LFF113FP Flood Protection ACV
0113134	For existing Backflow RPZ assemblies.

NOTICE

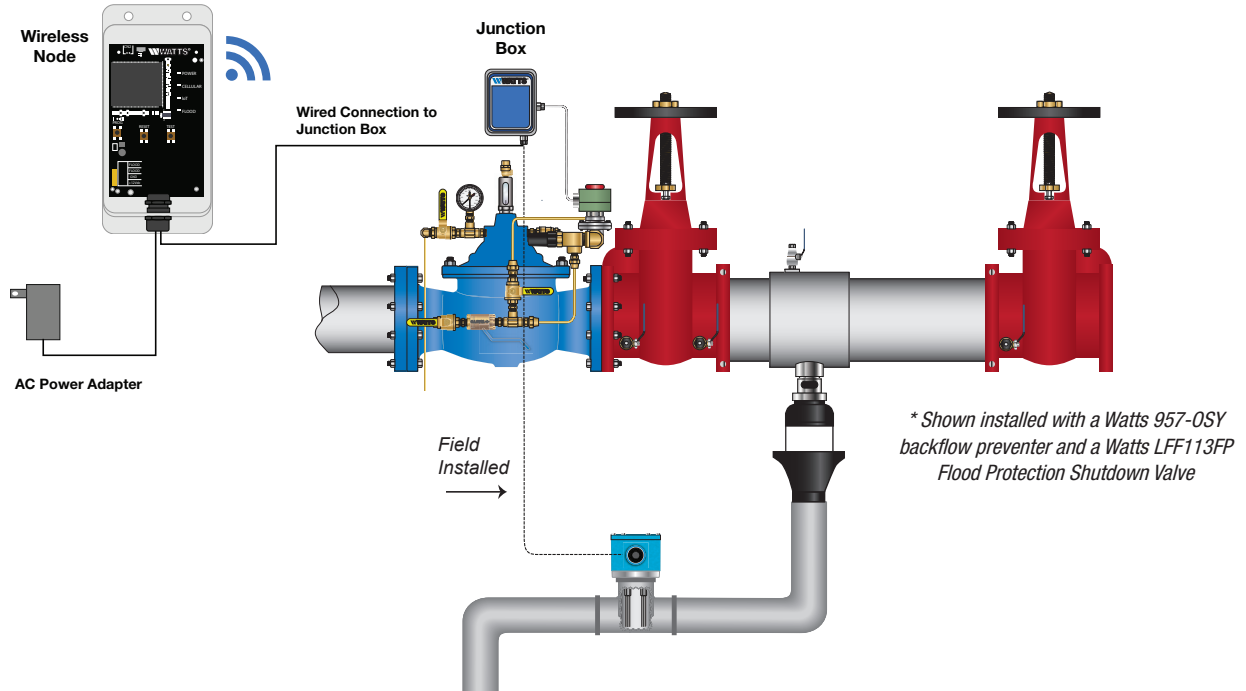
Use of the Watts SentryPlus Alert Universal Upgrade Kit does not replace the need to comply with all required instructions, codes, and regulations related to the installation, operation, and maintenance of an RPZ backflow preventor, including the need to provide proper drainage in the event of a discharge.

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

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

Typical Installation



Operation

The SentryPlus Alert™ system detects helps to protect against a catastrophic property damage that can occur due to Relief Valve discharge and/or a blocked or overwhelmed floor drain during normal relief valve operation. Typical conditions that may cause continuous relief valve discharge are:

- Fouled First Check Seat due to dirt, debris or rocks
- Failed First Check Spring
- Clogged or blocked Relief Valve Sensing Line
- Relief Valve Diaphragm failure

The SentryPlus Alert™ detects continuous relief valve discharge through the drain pipe using the FS99 flow sensor. An adjustable time delay in the JB113 junction box avoids accidental triggering of an alert due to intermittent or nuisance relief valve discharge. Once the amount of time set has passed, it will trigger the WN113 wireless node to send a cellular signal to communicate with the Syncta™ platform. Registered devices will receive an alert in chosen format, any combination of phone call, text message, or email.

When the flow sensor no longer senses flow, another wireless signal will be sent to registered devices indicating that the flood condition has ceased.

The SentryPlus Alert™ system can be integrated into the LFF113FP flood protection valve. It is a normally open valve installed upstream of the RPZ backflow preventer. The JB113 box is connected to the LFF113FP solenoid valve to provide automatic shutoff for flood protection. Automatic shutoff valve must be manually reset. For more information please refer to the LFF113FP ES sheet on watts.com

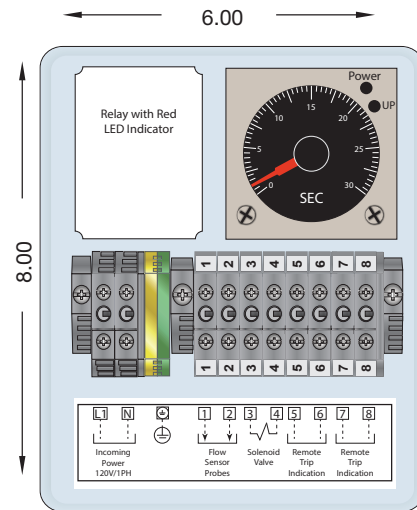
Junction Box (JB113)

The JB113 Junction Box is a lockable NEMA 4 enclosure equipped with an adjustable time delay, electrical relay and terminal strip. There are three 3/4 inch conduit connections.

The JB113 Junction Box is equipped with an adjustable time delay to avoid triggering an alert due to intermittent or nuisance relief valve discharge. The time delay is adjustable from 0 seconds to over 1 hour.

Adjusting the dial clockwise increases the time delay. Adjusting the dial counterclockwise decreases the time delay.

The JB113 junction box can be wired to the valve solenoid on a Watts LFF113FP. The LFF113FP is normally open and closes after the set time delay when continuous relief valve discharge through the drain pipe is sensed by the FS99 Flow Sensor. Automatic shutoff valve must be manually reset. For more information please refer to the LFF113FP ES sheet on watts.com



Wireless Node (WN113)

Watts Wireless Node (WN113) is hardwired to Electronics Junction Box (JB113) and are in constant communication with each other. WN113 communicates via cellular network with Watts Syncta® Cloud IoT platform. In case of an abnormal continuous discharge from the relief valve, the unit wirelessly notifies user alerting them of the fault condition. When combined with a Model LFF113FP Flood Protection ACV, the LFF113FP then shuts down the inlet to prevent possible property damage.

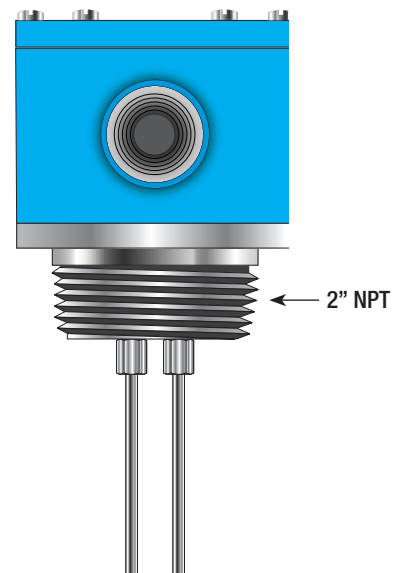
WN113 is a remote mounted, electrically powered and comes with a wall adapter for standard 120vac outlet. It can be mounted up to 100ft away from the Electronics Junction Box (JB113).



FS99 - Flow Sensor

The FS99 Flow Sensor is field installed in the discharge piping from the RPZ Relief Valve. The FS99 senses water in the discharge piping signaling the JB113 Junction Box to close the valve.

Front View



Specifications

The Watts Universal Upgrade Kit shall monitor for continuous relief valve discharge from a Reduced Pressure Zone Backflow Assembly, and automatically warn if the RPZ relief valve begins to discharge. A Time Delay supplied in the JB113 Junction Box shall prevent the valve from issuing false warnings on intermittent discharges from the RPZ relief valve. If continuous Relief Valve discharge occurs, the FS99 Flow Sensor installed horizontally in the RPZ Relief Valve discharge piping shall send a signal to the JB113 Junction Box.

The Electronics Junction Box (JB113) connects to Wireless Node Junction Box (WN113) for wireless communication alerting the user via text, phone or email. Additionally, an extra set of Remote Trip Indication terminals allow users to get remote alarms at their Building Management System (BMS) / PLC controller in the Control Room.

The Electronics Junction Box (JB113) and Wireless Node Junction Box (WN113) shall be field mounted. The FS99 Flow Sensor shall be provided with the Upgrade Kit package and shall be field installed in a horizontal position in the RPZ Relief Valve discharge piping.

Vertical installation of the Flow Sensor shall not be acceptable.

