

Engineering Specification

Job Name _____

Job Location _____

Engineer _____

Approval _____

Contractor _____

Approval _____

Contractor's P.O. No. _____

Representative _____

ACV Assure™ Monitoring System

Watts® ACV Assure™ is the affordable monitoring solution that helps water utilities monitor operations, pressure, flow, and loss. Register your system to enable instant text and email alerts in the event of a pressure or flow condition, and to set up geo-locations for your water distribution system.

ACV Assure uses SentryPlus Alert™ Technology to continuously monitor your system's water pressure and flow. Make informed decisions with insight into mission-critical water distribution system operating conditions. Use ACV Assure to access your alert history, service schedules, geo-locations, insight into system conditions, and more.

Features

- Easily manage your water utility assets
- Continuously monitor system pressure and flow
- Get insight into operating conditions with instant text and email alerts
- Access your full alert history
- Set up service reminders
- Register to set up geo-locations for your water distribution system

NOTICE

Use of the Watts ACV Assure Monitoring System does not replace the need to comply with all required instructions, codes, and regulations related to the installation, operation, and maintenance of an automatic control valve or other water assets, 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.

ORDERING CODE	DESCRIPTION
10101000	ACV Assure Flow and Pressure Monitoring System
10101001	ACV Assure Flow Monitoring System
10101002	ACV Assure Pressure Monitoring System



Flow Switch

Control Box



Cellular Gateway



Pressure Sensor



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.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.



ACV Assure Flow & Pressure Monitoring System

EDP 10101000

- Control Box
- Cellular Gateway
- Flow Switch
- Pressure Transducer & Controller
- Hardware

ACV Assure Flow Monitoring System

EDP 10101001

- Control Box
- Cellular Gateway
- Flow Switch
- Hardware

ACV Assure Pressure Monitoring System

EDP 10101002

- Control Box
- Cellular Gateway
- Pressure Transducer & Controller
- Hardware

Operating Specifications

Electrical Rating:

120VAC, 50/60Hz (Standard)
24VDC (contact Authorized Service Provider)
12VDC (contact Authorized Service Provider)

Temperature Range:

-4°F to 180°F (Flow Switch/Pressure Transducer)
32°F to 122°F (Control Box and Cellular Gateway)

ACV Assure Components

Control Box

The Control Box is equipped with connections for the electronics that allows the monitoring interaction from external components. The control box comes standard with a 120VAC to 24VDC power supply, a DPDT relay for solenoid valve zone control or contactor operation, and a barrier terminal strip for power and input/output circuits.



Flow Switch

The flow switch is installed in system piping to monitor water velocity within the monitor water distribution network. It will signal the cellular gateway to send wireless alerts to the dashboard.



F51 Limit Switch

The Watts F51 limit switch is installed in the automatic control valve cover and connected to the control box. The F51 will signal the cellular gateway to indicate if the automatic control valve is in the open or closed position.



For more information or questions about your application how ACV Assure can help you, please contact Watts at 1-978-689-6066 or email us at ACVAssure@WattsWater.com.



Cellular Gateway

Watts Control Box is hard-wired to the Cellular Gateway and are in constant communication with each other. The Cellular Gateway communicates via cellular network with Cloud IoT platform. Based on the system configuration and notification settings, the unit wirelessly notifies user alerting them of the asset condition.



Cellular Gateway is a remote mounted, electrically powered and receives power via connection to the Control Box. It can be mounted up to 100ft away from the Control Box.

Pressure Transducer/Controller

The pressure transducer/controller is installed in system piping to monitor water velocity within the monitor water distribution network. It will signal the cellular gateway to send wireless alerts to the dashboard.



ACV Assure Dashboard

Enter your water distribution assets to the ACV Assure online and mobile dashboard to track, organize, monitor sensor inputs, and sort the cellular gateway input alert history. Geolocate each asset, add ACV preventative maintenance schedules, and keep installation files and images in your water distribution network profile.

