



# Model ZCSM-PF and ZCSM-BTM

Zurn Connected Pressure Monitor (ZCSM-PF) with optional  
Zurn Connected Flow Meter (ZCSM-BTM)



### Application

#### ZCSM-PF Connected Pressure Monitor

Designed for use and installation on 2-1/2" – 12" Zurn Wilkins backflow prevention valves to continually monitor your plumbing system water pressure. The ZCSM-PF Connected Pressure Monitor transmits plumbing system pressure data 24/7 to the Zurn plumbSMART™ web portal and mobile app. Proactively monitor your incoming water pressure, receive real-time alerts for preset high and low pressure parameters, and access system data for trends and predictive maintenance anytime and anywhere.

### Features

- Maximum working water pressure of 200 PSI
- End connection: 1/4" male NPT (ANSI/ASME B1.20.1)
- Bleed valve: 1/4" female NPT (ANSI/ASME B1.20.1)
- 1/2" x 1/4" NPT bushing
- 3/4" x 1/2" NPT bushing
- AC wall adapter with 6 foot power cord
- Cable pigtail for connection to optional flow meter



### ZCSM-PF Connected Pressure Monitor Standards Compliance

- Meets the requirements of NSF/ANSI 61\*  
\*(0.25% MAX. WEIGHTED AVERAGE LEAD CONTENT)  
This device complies with Part 15 of the FCC Rules.

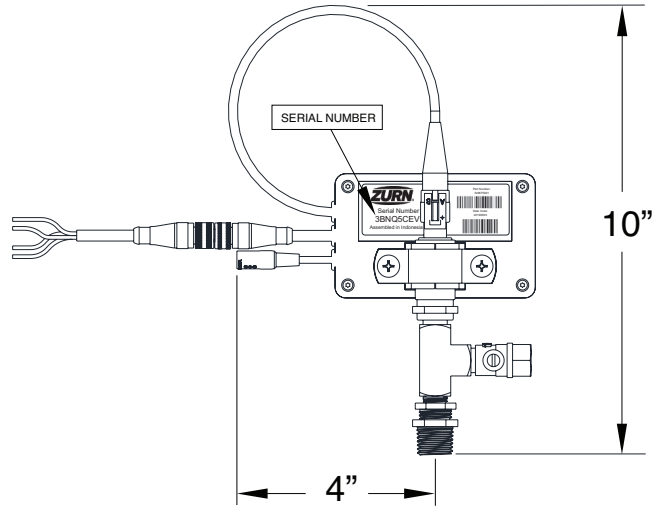
### Electrical Requirements

P6000-ACA: AC adapter:	120vac, 0.2A
Operating Temperature:	20°F to 120°F
Storage Temperature:	-4°F to +175°F
Relative Humidity:	10% – 90%
Pressure Sensor:	Mounted on housing

### Required Accessory

A Zurn Connected Gateway installed within 1,000 feet is required for system monitoring. Two models are offered:

- Ethernet only    ZGW-LORA-W1-ETH
- LTE / Cellular    ZGW-LORA-W1-LTE



### Optional ZCSM-BTM Connected Flow Meter

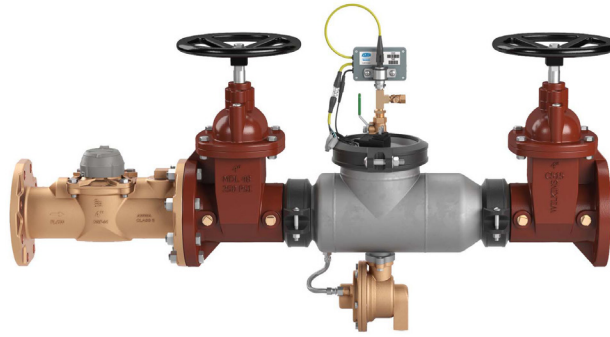
Designed for use with 3" – 10" Zurn Wilkins backflow prevention valves to continually monitor water flow and consumption. This turbine water meter with electronic register can be installed either upstream or downstream of the backflow preventer. It connects with the ZCSM-PF Connected Pressure Monitor to transmit flow and consumption data to plumbSMART™.



METER SIZE (INCHES)	MIN FLOW RATE (GPM)	MAX CONTINUOUS FLOW (GPM)	LENGTH	WIDTH	HEIGHT	PRESSURE LOSS AT MAX CONT. FLOW (PSID)
3	4	450	12	7.5	8.7	1.8
4	6	1000	14	9	9.7	7.3
6	12	2000	18	11	13.3	4.8
8	20	3500	20	13.5	15.2	2.5
10	30	5500	26	16	17.5	1.6

The ZCSM-BTM Connected Flow Meter features a bronze body with ANSI class 125 flanges and 125 PSI maximum operating pressure. The flow meter must be installed so that center of the flow meter is within 6 feet of the ZCSM-PF Connected Pressure Monitor.

## Typical Installation on 4" Model 375AST backflow preventer, shown with 4-ZCSM-BTM Connected Flow Meter upgrade.



### How it works

The ZCSM-PF Connected Pressure Monitor continuously monitors plumbing system water pressure. Once per hour, water pressure data is transmitted to the plumbSMART™ portal. When connected to a ZCSM-BF Connected Flow Meter, water flow rate and water usage data is also transmitted to the portal hourly. Facilities managers and/or maintenance personnel can view all data and trends in the plumbSMART™ portal and may opt to receive real-time alerts via email or text message if any of these readings exceed or fall below customizable parameters for high and low pressure and/or flow levels. All notifications and alert parameters are adjustable via the plumbSMART™ portal. For more information, visit <https://www.zurn.com/innovation-efficiency/plumbsmart>.

To access pressure and flow data, receive real-time alerts, and connect to the plumbSMART™ portal, a Zurn Gateway (see above Required Accessory section) must be installed within 1,000 feet of the ZCCM-PF Connected Pressure Monitor, and connected products must be registered with Zurn plumbSMART™. A single Zurn Gateway can be used to connect hundreds of Zurn connected plumbing products.

### Call Before You Install

1. Document the serial number from the label on the backside of your ZCSM-PF Connected Pressure Monitor.
2. Call us at 844-987-6737 or visit [zurn.com/plumbsmart-connect](http://zurn.com/plumbsmart-connect) to save time and money on your installation.
3. Tell us the serial number and provide a contact name, email address, and basic information about the installation site.
4. We will activate your plumbSMART™ account, set up your enterprise, and give you guidance on how to register each connected product as you install it.
5. We will send a confirmation email with a link, or you can go to [plumbsmart.zurn.com](http://plumbsmart.zurn.com) to log into your plumbSMART™ account for the first time.
6. Add other users and installers to your plumbSMART™ account.
7. Make sure you and/or your installers have the plumbSMART™ mobile app, which you can download from the App Store or Google Play.
8. Using the mobile app, enter the serial number to register and locate each connected plumbing product as you install it.
9. Watch the how-to videos in the plumbSMART™ portal's support section if you get stuck, or call us at 844-987-6737 for support.

### Specification

Zurn Connected plumbing products are equipped with advanced sensors that track product usage and performance. This data is transmitted wirelessly via the built-in LoRa radio system to a Zurn Gateway, which then sends the data to the Zurn Cloud via Ethernet connection to the local area network (LAN) or via LTE cellular. The LTE cellular option means the data never touches your local network. Algorithms in the Zurn Cloud analyze the data, which is displayed on our secure web portal and mobile app, plumbSMART™. Zurn Connected plumbing products and data from plumbSMART™ may be customized to communicate with existing building management systems (BMS), depending on the communication protocols in use. Each Zurn Connected plumbing product comes with default alert parameters for water flow, product usage, etc. Alert parameters can be customized in plumbSMART™ based on the specific needs of your building and maintenance protocols. Depending on the functionality of the equipment, some Zurn Connected Products can sense when to act in order to protect your building.

The Zurn Wilkins backflow preventer shall be monitored for pressure and flow by a ZCSM-PF Zurn Connected Pressure Monitor with an optional ZCSM-BTM Zurn Connected Flow Meter. The pressure and optional flow sensor data shall be transmitted wirelessly by the ZCSM-PF Zurn Connected Pressure Monitor to a LoRa Gateway. Aggregated sensor data shall be transmitted securely using a Local Area Network or cellular LTE network and made available to the owner via the plumbSMART™ portal. The Connected Pressure Monitor shall operate with standard 120V AC power. Data from the ZCSM-PF Connected Pressure Monitor and optional ZCSM-BTM Zurn Connected Flow Meter shall support the detection of flooding, leaks, and other conditions requiring major repairs with alerts, preventative maintenance scheduling, water usage measurement and verification, and product performance enhancements through analytics. The Connected Pressure Monitor shall be a Zurn ZCSM-PF.