

# Model 375W1 (Connected Backflow w/ Wireless Monitor)

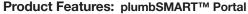
# Reduced Pressure Principle Assembly with Integral Relief Valve Monitor

## **Architectural/Engineering Specification:**

#### **Zurn Connected Backflow with Relief Valve Monitors**

transmit data 24/7 to the Zurn plumbSMART™ web portal and mobile app. Proactively monitor your relief water discharge and system pressure data, receive real-time alerts for preset discharge volumes and low pressure parameters, and access system data for trends and predictive maintenance anytime and anywhere.

Zurn Model 375W1 Reduced Pressure Principle Backflow Preventer with Relief Valve Monitors provide high hazard protection and are ideal for use in Mechanical rooms, basements and enclosures where undetected relief valve discharge could potentially cause water damage. The responsive electronics controller constantly monitors zone pressure and the relief valve discharge to determine if a fouled check valve or water hammer is causing a relief valve discharge.



- Monitor discharge volume and pressure anywhere in your building
- · Receive real-time alerts
- · Manage maintenance tasks
- · Receive insights on your data

375W1 Sizes: 2 1/2", 3", 4", 6", 8", 10"

## **Technical Specification:**

Maximum working water pressure 175 PSI Maximum working water temperature 140°F Hydrostatic test pressure 350 PSI End connections

> (Grooved for steel pipe) AWWA C606 (Flanged Bolt Pattern) ASME B16.42

> > Class 150

**Electrical Requirements:** 

Input Power Supply: 100 - 126V AC, 50/60Hz; 375 mA

4.0V DC: 0.44A Output Voltage: Operating Temperature: 20°F to 120°F -4°F to +175°F Storage Temperature: Relative Humidity: 10% - 90%

Pressure Sensor: Mounted on main backflow valve Position Sensor: Mounted on main relief valve

#### **Zurn Gateway:**

- · Communicates via Ethernet or LTE
- · Works with all Zurn connected devices
- · Connects all endpoints up to 1,000 ft radius
- · After purchase request your gateway at: zurn.com/plumbsmart-gateway or Call 1-844-987-6737







See Model FCIS spec sheet to combine with ACV for automatic flood control shutdown system

#### Options

(Suffixes can be combined)

- with NRS shut-off valves (standard)
- with grooved end NRS gate valves  $\Box$  G ☐ GF
  - with grooved inlet connection and flanged outlet connection
- □ FG with flanged inlet connection and grooved outlet connection
- □ OSY with OS&Y gate valves
- □ OSYG with grooved end OS&Y gate valves
- □ BG with grooved end butterfly valves with integral
  - supervisory switches

#### **Accessories**

- ☐ OS & Y Gate valve tamper switch (OSY-40)
- ☐ Air gap (Model AG)
- ☐ Wireless Monitor Retrofit Kit for conversion of existing model 375 (212-6-RFK-375W1, 8-10-RFK-375W1)

#### **Compliance and Certification**

- Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California
- AWWA Compliant C511 (with gates only) and C550
- ASSE® Listed 1013
- cUPC® Listed
- Meets the requirements of NSF/ANSI/CAN 61\* \*(0.25% MAX. WEIGHTED AVERAGE LEAD CONTENT)

This device complies with Part 15 of the FCC Rules and ISED Canada RSS Standards.

# **Gateway Options**

(Required & Sold Separately)

-LTE ZGW-LORA-W1-LTE ZGW-LORA-W1-ETH -Ethernet

**Note:** plumbSMART™ is free-to-connect to a basic plan

Note: LTE charges will apply to basic plan

#### How it works

The Model 375W1 Connected Backflow with Wireless Monitor continuously monitors relief water discharge and system water pressure. Once per hour, water pressure data is transmitted to the plumbSMART™ portal. 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 levels. All notifications and alert parameters are adjustable via the plumbSMART™ portal. For more information, visit <a href="https://www.zurn.com/innovation-efficiency/plumbsmart">https://www.zurn.com/innovation-efficiency/plumbsmart</a>.

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 pressure, 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.

To access the plumbSMART<sup>™</sup> portal, a Zurn Gateway must be installed within 1,000 feet of the connected product, and Connected products must be registered with Zurn plumbSMART<sup>™</sup>. A single Zurn Gateway can be used to connect hundreds of Zurn Connected plumbing products.

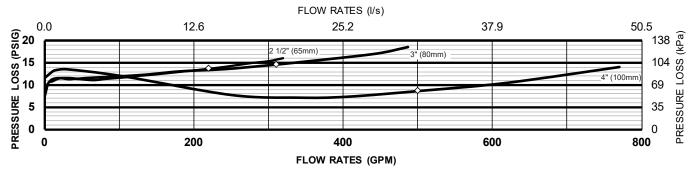
#### Connecting to the plumbSMART™ Portal:

- Document the serial number from the label inside the electronics enclosure. The serial number is printed on the left side
  of the label below the QR code.
- Visit www.zurn.com/plumbSMART-connect to save time and money on your installation. You can also call us at 844-987-6737.
- 3. Provide the serial number and contact name, email address, and basic information about the installation site.
- We will activate your plumbSMART<sup>™</sup> account, set up your enterprise, and give you guidance on how to register each connected product as you install it.
- We will send a confirmation email with a link, or you can go to 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 iPhone App Store or Google Play.
- 8. Using the mobile app, scan or enter the serial number to register and locate each connected plumbing product as you install it.
- Watch the how-to videos in the plumbSMART<sup>™</sup> portal's support section if you get stuck, or call us at 844-987-6737 for support.

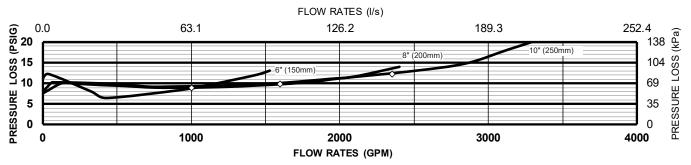




## MODEL 375W1 2 1/2", 3" & 4" (STANDARD & METRIC)

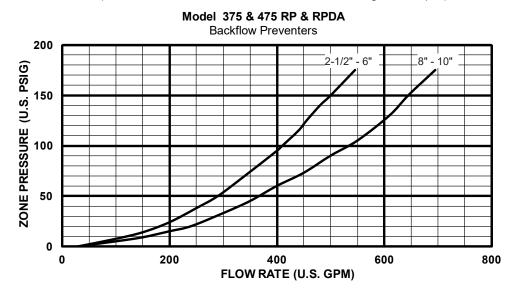


## MODEL 375W1 6", 8" & 10" (STANDARD & METRIC)



# Relief Valve Discharge Rates

(Worst case condition - If 1st check or relief valve is lodged wide open)



**Materials** 

Main valve body
Access covers
Ductile Iron ASTM A 536
Ductile Iron ASTM A 536
Coatings
NSF Approved fusion epoxy

finish

Internals Stainless steel, 300 Series

NORYL™

Fasteners
Seal rings
Seal rings
O-rings
Springs
Stainless Steel, 300 Series
EPDM (FDA approved)
Springs
Stainless Steel, 300 Series
Stainless Steel, 300 Series
Stainless Steel, braided hose
Switch Cover
Nylon, UV resistant, glass filled

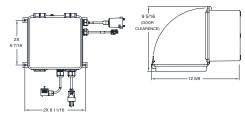


Model 375W1 (flange body) and Model 375AW1 (grooved body) have different lay lengths

## Relief Valve Discharge Port:

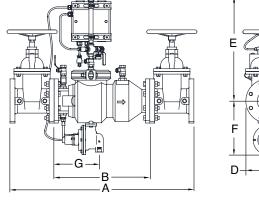
2 1/2" - 6" - 2.75 sq. in. 8" - 10" - 3.69 sq. in.

#### Dimensions & Weights (does not include pkg.)



EXTERNAL CABLE FOR THE WALL MOUNT CONFIGU-RATION IS ONLY 6 FEET LONG BOX ONLY SHOWN, 317829

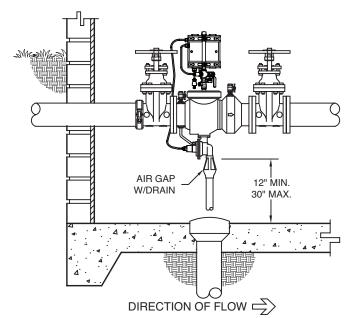
#### Model 375W1 with NRS option



MODEL	)EI	DIMENSION (approximate)															WEIGHT																		
375W1 SIZE		А		A WITH BUTTERFLY VALVES		B LESS GATE VALVES		С		D		E OS&Y OPEN		E OS&Y CLOSED		E NRS GATE		E WITH BUTTERFLY VALVES		F		G		LESS SHUT- OFF VALVES		NRS GATE VALVES FLANGED		NRS GATE VALVES GROOVED		OS&Y GATE VALVES FLANGED		OS&Y GATE VALVES GROOVED		BUTTERFLY VALVES GROOVED	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg
2 1/2	65	31	787	28	711	15 7/8	403	7 1/4	184	3 3/4	95	26 1/8	663	26 1/8	663	26 1/8	663	26 1/8	663	9 1/2	241	8 3/8	213	65	30	167	76	149	68	175	79	157	71	137	62
3	80	32	813	28 1/2	724	15 7/8	403	7 1/4	184	3 3/4	95	26 5/16	668	26 5/16	668	26 5/16	668	26 5/16	668	9 1/2	241	8 3/8	213	65	30	189	86	159	72	195	89	147	67	117	53
4	100	37 5/8	956	32 8/9	835	19 1/2	495	8	203	4 1/2	114	22 1/2	572	26 1/2	673	26 1/2	673	26 1/2	673	11	279	9 1/4	235	103	47	283	128	265	120	293	133	279	127	187	85
6	150	44 3/4	1137	37 5/8	956	23 1/2	597	10	254	6	152	30 1/2	730	30 1/2	730	30 1/2	730	30 1/2	730	12 3/8	314	10 3/4	273	180	82	464	211	436	198	480	218	454	206	298	135
8	200	60 3/4	1543	53 7/8	1369	37 3/4	959	11	279	10	254	37	940	34 1/2	876	34 1/2	876	34 1/2	876	15 3/8	391	16 3/4	425	382	173	834	378	800	363	858	389	810	367	556	252
10	250	63 3/4	1619	57 7/8	1470	37 3/4	959	11	279	10	254	45 5/8	1159	34 3/4	883	34 3/4	883	34 1/2	876	15 3/8	391	16 3/4	425	412	187	1172	532	1106	502	1230	558	1164	528	800	363

# Typical Installation

Local codes shall govern installation requirements. Unless otherwise specified, the assembly shall be mounted at a minimum of 12" (305mm) and a maximum of 30" (762mm) above adequate drains with sufficient side clearance for testing and maintenance. The installation shall be made so that no part of the unit can be submerged.



#### INDOOR INSTALLATION (375W1GF)

#### **Detailed Specifications**

The Reduced Pressure Principle Backflow Prevention Assembly shall be certified to NSF/ANSI/CAN 61, ASSE® Listed 1013, and supplied with full port gate valves. The main body and access cover shall be epoxy coated ductile iron (ASTM A 536), the seat ring and check valve shall be NORYL™, the stem shall be stainless steel (ASTM A 276) and the seat disc elastomers shall be EPDM. The checks and the relief valve shall be accessible for maintenance without removing the device from the line. The Reduced Pressure Principle Backflow Prevention Assembly shall be a ZURN WILKINS Model 375W1.

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