



# Model 475STDA

## Reduced Pressure Detector Assembly

### Application

Designed for drop in replacement of competitor valves and new installation on water lines in fire protection systems to protect against both backsiphonage and backpressure of contaminated water into the potable water supply. The Model 475STDA shall provide protection where a potential health hazard exists. The Model 475STDA is approved for applications requiring flow vertical up and vertical down (standard) or flow vertical up and vertical up (V option). Incorporates metered by-pass to detect leaks and unauthorized water use.

### Standards Compliance

- Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California (VUVU and VUVU orientations)
- ASSE® Listed 1047
- AWWA Compliant C550
- CSA® Certified B64.4
- UL® Classified
- C-UL® Classified
- FM® Approved
- Meets the requirements of NSF/ANSI/CAN 61\*

\*(0.25% MAX. WEIGHTED AVERAGE LEAD CONTENT)

### By-Pass Backflow Assembly 3/4" Model 975XLDTCU

### Materials

Main valve body 304L Stainless steel  
 Access covers 304L Stainless steel  
 Internals Stainless steel, 300 Series  
 Fasteners & Springs Stainless Steel, 300 Series  
 Elastomers EPDM (FDA approved)  
 Polymers BUNA NITRILE (FDA approved)  
 Sensing line NORLYL™, NSF Listed  
 Stainless steel, braided hose

### Features

Sizes: 4", 6", 8", 10"  
 Maximum working water pressure 175 psi  
 Minimum working water pressure 25 psi  
 Maximum working water temperature 140° F  
 Minimum working water temperature 33° F  
 Hydrostatic test pressure 350 psi  
 End connections (Grooved for steel pipe) AWWA C606  
 (Flanged bolt pattern) ASME B16.42 Class 150



NSF/ANSI/CAN 61

### Options

(Suffixes can be combined)

- with OS & Y gate valves (standard)
- LM - less water meter
- with gpm meter (standard)
- CFM - with cu ft/min meter
- V - vertical flow up (VUVU) orientation
- G - with groove end gate valves
- FG - with flanged inlet gate connection and grooved outlet gate connection
- BG - with grooved end butterfly valves with integral supervisory switches
- BF - with flanged end butterfly valves with integral supervisory switches
- PI - with post indicator gate valve
- RV - with relief valve, by-pass and shut-off valves on reverse side

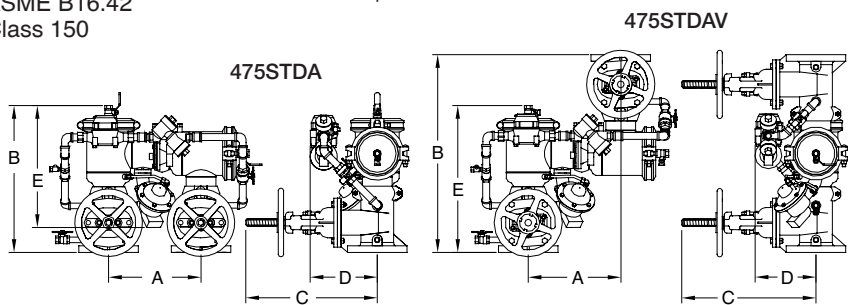
### Accessories

- Air gap (see spec sheet BF-AG)
- Repair kit (rubber only)
- Thermal expansion tank (Model XT)
- Valve setter (Model FLSST or MJSST or MJFSST)
- Gate valve tamper switch (OSY-40)
- QT-SET Quick Test Fitting Set
- 4" X 3" flanged setter adapters (RFK4X3-400ST)

Relief Valve discharge port;  
 2 1/2" - 6" - 2.75 sq. in.  
 8" - 10" - 3.69 sq. in.

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

| SIZE | WEIGHT                |     |                       |     |                        |     |                        |     |
|------|-----------------------|-----|-----------------------|-----|------------------------|-----|------------------------|-----|
|      | WITH OS&Y GATES (GXF) |     | WITH OS&Y GATES (GXG) |     | WITH BFLY VALVES (GXF) |     | WITH BFLY VALVES (GXG) |     |
|      | lbs.                  | kg  | lbs.                  | kg  | lbs.                   | kg  | lbs.                   | kg  |
| 4"   | 215                   | 98  | 195                   | 89  | 166                    | 75  | 143                    | 65  |
| 6"   | 343                   | 155 | 319                   | 144 | 232                    | 105 | 201                    | 91  |
| 8"   | 594                   | 269 | 556                   | 252 | 440                    | 200 | 394                    | 179 |
| 10"  | 837                   | 379 | 783                   | 355 | 549                    | 249 | 491                    | 223 |

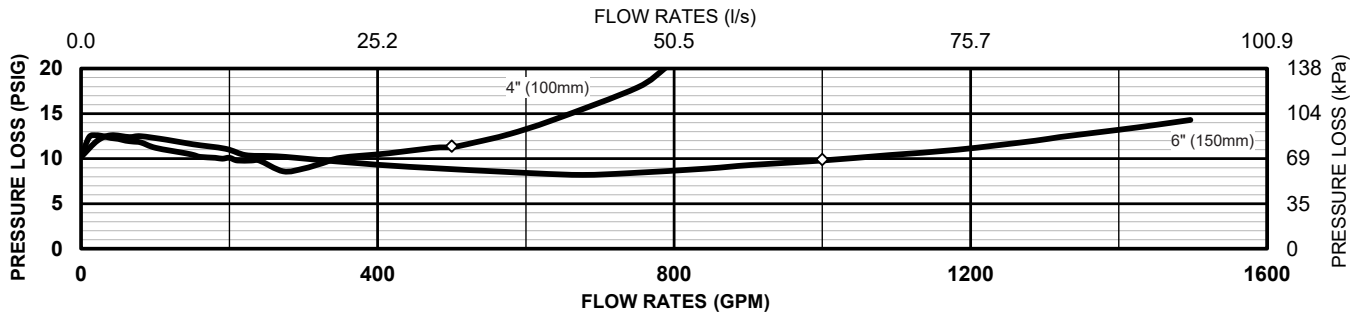


| SIZE         | DIMENSION (approximate) |        |                    |        |                         |          |             |        |               |        |                         |        |     |        |     |        |                         |        |     |
|--------------|-------------------------|--------|--------------------|--------|-------------------------|----------|-------------|--------|---------------|--------|-------------------------|--------|-----|--------|-----|--------|-------------------------|--------|-----|
|              | A                       |        | B WITH GATE VALVES |        | B WITH BUTTERFLY VALVES |          | C OS&Y OPEN |        | C OS&Y CLOSED |        | C WITH BUTTERFLY VALVES |        | D   |        | E   |        | E WITH BUTTERFLY VALVES |        |     |
|              | in.                     | mm     | in.                | mm     | in.                     | mm       | in.         | mm     | in.           | mm     | in.                     | mm     | in. | mm     | in. | mm     | in.                     | mm     |     |
| 4" 475STDA   | 100                     | 14     | 356                | 22 1/4 | 565                     | 19 7/8   | 505         | 22 1/2 | 572           | 18 1/4 | 464                     | 9      | 229 | 10 1/8 | 257 | 18 3/8 | 467                     | 18 3/8 | 467 |
| 4" 475STDAV  | 100                     | 14     | 356                | 29 7/8 | 760                     | 25 1/8   | 638         | 22 1/2 | 572           | 18 1/4 | 464                     | 9      | 229 | 10 1/8 | 257 | 22 1/4 | 565                     | 19 7/8 | 505 |
| 6" 475STDA   | 150                     | 16     | 406                | 27 7/8 | 708                     | 24 3/4   | 630         | 30 1/2 | 775           | 24 1/4 | 616                     | 10 1/4 | 260 | 10 5/8 | 270 | 22 3/8 | 570                     | 22 3/8 | 570 |
| 6" 475STDAV  | 150                     | 16     | 406                | 36 1/4 | 921                     | 29 1/8   | 740         | 30 1/2 | 775           | 24 1/4 | 616                     | 10 1/4 | 260 | 10 5/8 | 270 | 27 7/8 | 708                     | 24 3/4 | 630 |
| 8" 475STDA   | 200                     | 18 1/2 | 470                | 34 7/8 | 886                     | 29 1/8   | 740         | 37     | 940           | 28 1/2 | 724                     | 12     | 305 | 12 7/8 | 327 | 30 5/8 | 780                     | 30 5/8 | 780 |
| 8" 475STDAV  | 200                     | 18 1/2 | 470                | 40 1/4 | 1022                    | 33 1/8   | 841         | 37     | 940           | 28 1/2 | 724                     | 12     | 305 | 12 7/8 | 327 | 34 7/8 | 886                     | 29 1/8 | 740 |
| 10" 475STDA  | 250                     | 21     | 533                | 38 3/4 | 984                     | 35 3/4   | 910         | 45 5/8 | 1159          | 34 3/4 | 883                     | 13     | 330 | 12 7/8 | 327 | 32 3/4 | 832                     | 32 3/4 | 832 |
| 10" 475STDAV | 250                     | 21     | 533                | 45 7/8 | 1165                    | 39 13/16 | 1011        | 45 5/8 | 1159          | 34 3/4 | 883                     | 13     | 330 | 12 7/8 | 327 | 38 3/4 | 984                     | 35 3/4 | 908 |

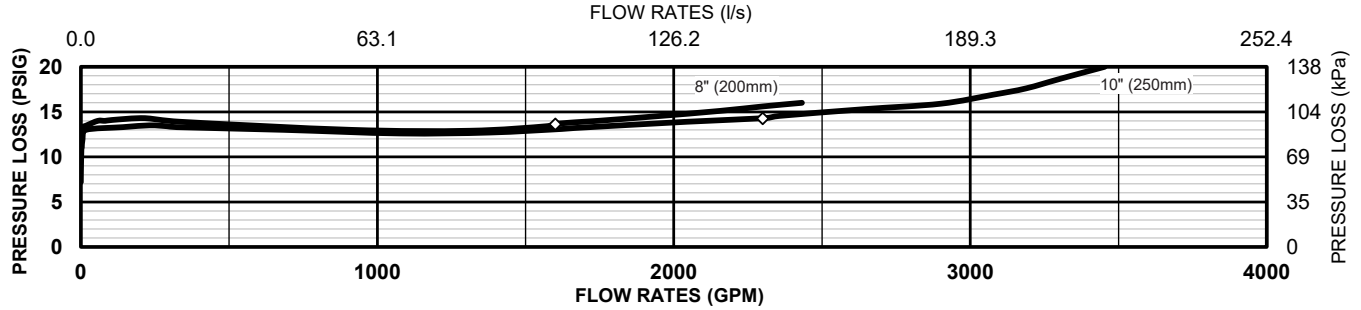
Zurn Industries, LLC | Wilkins  
 1747 Commerce Way, Paso Robles, CA U.S.A. 93446 Ph. 855-663-9876, Fax 805-238-5766  
 In Canada | Zurn Industries Limited  
 7900 Goreway Drive, Unit 10, Brampton, Ontario L6T 5W6, 877-892-5216  
[www.zurn.com](http://www.zurn.com)

Rev. M  
 Date: 03/22  
 Document No. BF-475STDA  
 Product No. Model 475STDA  
[Patent.zurn.com/patents](http://Patent.zurn.com/patents)

**475STDA & 475STDAV 4" & 6" (STANDARD & METRIC)**



**475STDA & 475STDAV 8" & 10" (STANDARD & METRIC)**

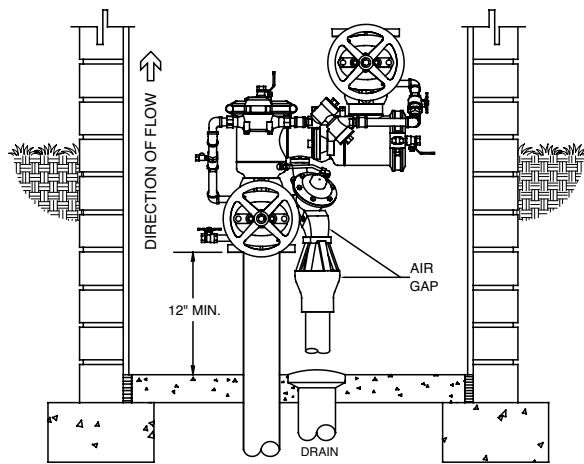


**Typical Installation**

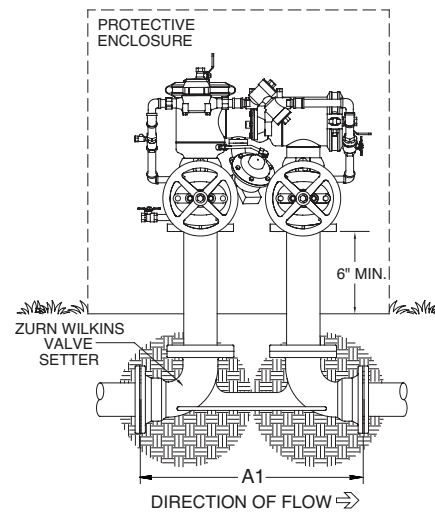
Local codes shall govern installation requirements. To be installed in accordance with the manufacturers' instructions and the latest edition of the Uniform Plumbing Code. Unless otherwise specified, the assembly shall be mounted above adequate drains with sufficient side clearance for testing and maintenance. The installation shall be made so that no part of the unit can be submerged.

| Capacity thru Schedule 40 Pipe (GPM) |          |            |           |           |
|--------------------------------------|----------|------------|-----------|-----------|
| Pipe size                            | 5 ft/sec | 7.5 ft/sec | 10 ft/sec | 15 ft/sec |
| 2 1/2"                               | 75       | 112        | 149       | 224       |
| 3"                                   | 115      | 173        | 230       | 346       |
| 4"                                   | 198      | 298        | 397       | 595       |
| 6"                                   | 450      | 675        | 900       | 1351      |
| 8"                                   | 780      | 1169       | 1559      | 2339      |
| 10"                                  | 1229     | 1843       | 2458      | 3687      |

| MODEL SIZE | DIMENSIONS (approximate) |        |                          |     |      |
|------------|--------------------------|--------|--------------------------|-----|------|
|            | A1 SETTER END TO END FLS |        | A1 SETTER END TO END MJS |     |      |
| in.        | mm                       | in.    | mm                       | in. | mm   |
| 4          | 100                      | 27     | 686                      | 30  | 762  |
| 6          | 150                      | 32     | 813                      | 35  | 890  |
| 8          | 200                      | 36 1/2 | 927                      | 39  | 991  |
| 10         | 250                      | 43     | 1092                     | 45  | 1143 |



VERTICAL INSTALLATION



OUTDOOR INSTALLATION

**Specifications**

The Reduced Pressure Detector Backflow Prevention Assembly shall be certified to NSF/ANSI/CAN 61, ASSE® Listed 1047, and supplied with full port OS & Y gate valves. The main body and access cover shall be 304L Stainless Steel, 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 Detector Backflow Prevention Assembly shall be a ZURN WILKINS Model 475STDA.