

# Model 475STR

# **Reduced Pressure Principle Assembly**

# Application

Designed for drop in replacement of Zurn Wilkins Model 475 and new installation on potable water lines to protect against both backsiphonage and backpressure of contaminated water into the potable water supply. Assembly shall provide protection where a potential health hazard exists. The Model 475STR is for applications requiring vertical flow up and vertical flow down. The configuration 475STRV is for applications requiring vertical flow up. Ideal for use where lead-free valves are required.

#### **Standards Compliance**

- Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California
- ASSE® Listed 1013
- AWWA Compliant C511 (with gates only), and C550
- CSA® Certified B64.4
- · UL® Classified
- · C-UL® Classified
- FM® Approved
- Meets the requirements of NSF/ANSI 61\*
- \*(0.25% MAX. WEIGHTED AVERAGE LEAD CONTENT)

#### **Materials**

Main Valve Body 304L Stainless steel 304L Stainless steel Access covers

Coatings FDA Approved electrostatic epoxy

finish

Internals Stainless steel, 300 Series

NORYL™, NSF Listed Stainless Steel, 300 Series EPDM (FDA approved)

Seal rings O-rings Buna Nitrile (FDA approved) Sensing line Stainless Steel, braided hose

# **Features**

Sizes: 4", 6", 8", 10"

Fasteners & Springs

Maximum working water pressure 175 psi Minimum working water pressure 25 psi 140° F Maximum working water temperature Minimum working water temperature 33° F Hydrostatic test pressure 350 psi

End connections (Grooved for steel pipe) **AWWA C606-DGL-87** 

> (Flanged bolt pattern) **ASME B16.42** Class 150

# Dimensions & Weights (do not include pkg.)

|      | WEIGHT                    |     |                           |     |                                |     |                                |     |                                 |     |                                 |     |  |
|------|---------------------------|-----|---------------------------|-----|--------------------------------|-----|--------------------------------|-----|---------------------------------|-----|---------------------------------|-----|--|
| SIZE | WITH<br>NRS GATE<br>(GXF) |     | WITH<br>NRS GATE<br>(GXG) |     | WITH<br>OS&Y<br>GATES<br>(GXF) |     | WITH<br>OS&Y<br>GATES<br>(GXG) |     | WITH<br>BFLY<br>VALVES<br>(GXF) |     | WITH<br>BFLY<br>VALVES<br>(GXG) |     |  |
|      | lbs. kg                   |     | lbs.                      | kg  | lbs.                           | kg  | lbs.                           | kg  | lbs.                            | kg  | lbs.                            | kg  |  |
| 4"   | 185                       | 84  | 165                       | 75  | 211                            | 95  | 191                            | 86  | 158                             | 72  | 135                             | 61  |  |
| 6"   | 306                       | 139 | 282                       | 128 | 338                            | 153 | 314                            | 143 | 224                             | 102 | 193                             | 88  |  |
| 8"   | 566                       | 257 | 528                       | 239 | 612                            | 278 | 574                            | 260 | 442                             | 200 | 396                             | 180 |  |
| 10"  | 779                       | 353 | 725                       | 329 | 865                            | 392 | 811                            | 368 | 552                             | 250 | 494                             | 224 |  |



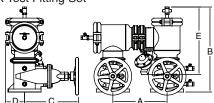


#### **Options**

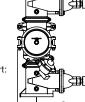
(Suffixes can be combined)

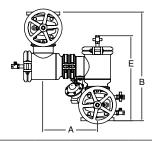
- with NRS shut-off valves (standard)
- $\Box$  G with groove end gate valves
- □ FG with flanged inlet gate connection and grooved outlet gate connection
- □ OSY with OS&Y gate valves
- with Integral Relief Valve Monitor Switch □ MS -
- □ V vertical flow up configuration
- with grooved end butterfly valves with integral □ BG supervisory switches
- □ BF with flanged end butterfly valves with integral supervisory switches
- with Post Indicator Gate Valve □ PI
  - with relief valve and shut-off valves on reverse □ -RV -
  - **Accessories** ☐ Air gap (see spec sheet BF-AG)
  - ☐ Repair kit (rubber only)
- ☐ Thermal expansion tank (Model XT) ☐ Valve setter (Model FLS or MJS or MJFS)
- ☐ Gate valve tamper switch (OSY-40)
- ☐ Electronic Solenoid Timer (Model EST)
- ☐ QT-SET Quick Test Fitting Set

475STR



## 475STRV





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

|            |     |          | DIMENSION (approximate) |                  |      |                              |      |                   |      |                     |     |                |     |                                  |     |       |     |        |     |                                  |     |
|------------|-----|----------|-------------------------|------------------|------|------------------------------|------|-------------------|------|---------------------|-----|----------------|-----|----------------------------------|-----|-------|-----|--------|-----|----------------------------------|-----|
| SIZE       |     | A        |                         | B WITH GATE BUTT |      | B<br>WITI<br>BUTTEF<br>VALVI | RFLY | C<br>OS&Y<br>OPEN |      | C<br>OS&Y<br>CLOSED |     | C<br>NRS GATES |     | C<br>WITH<br>BUTTERFLY<br>VALVES |     | D     |     | E      |     | E<br>WITH<br>BUTTERFLY<br>VALVES |     |
| in.        | mm  | in.      | mm                      | in.              | mm   | in.                          | mm   | in.               | mm   | in.                 | mm  | in.            | mm  | in.                              | mm  | in.   | mm  | in.    | mm  | in.                              | mm  |
| 4" 475ST   | 100 | 18 5/16  | 465                     | 22 1/4           | 565  | 19 7/8                       | 505  | 22 1/2            | 572  | 9                   | 229 | 14 1/2         | 368 | 9                                | 229 | 4 3/4 | 119 | 18 3/8 | 467 | 18 3/8                           | 467 |
| 4" 475STV  | 100 | 18 5/16  | 481                     | 29 7/8           | 760  | 25 1/8                       | 638  | 22 1/2            | 572  | 9                   | 229 | 14 1/2         | 368 | 9                                | 229 | 4 3/4 | 119 | 22 1/4 | 565 | 19 7/8                           | 505 |
| 6" 475ST   | 150 | 18 11/16 | 475                     | 27 7/8           | 708  | 24 3/4                       | 630  | 30 1/2            | 775  | 10 1/2              | 267 | 18             | 457 | 10 1/4                           | 260 | 6 1/8 | 158 | 22 3/8 | 570 | 22 3/8                           | 570 |
| 6" 475STV  | 150 | 18 11/16 | 533                     | 36 1/4           | 922  | 29 1/8                       | 740  | 30 1/2            | 775  | 10 1/2              | 267 | 18             | 457 | 10 1/4                           | 260 | 6 1/8 | 158 | 27 7/8 | 708 | 24 3/4                           | 630 |
| 8" 475ST   | 200 | 29       | 737                     | 34 7/8           | 886  | 29 1/8                       | 740  | 37                | 940  | 12                  | 305 | 22             | 560 | 12                               | 305 | 8 7/8 | 223 | 30 5/8 | 780 | 30 5/8                           | 780 |
| 8" 475STV  | 200 | 29       | 770                     | 40 1/4           | 1022 | 33 1/8                       | 841  | 37                | 940  | 12                  | 305 | 22             | 560 | 12                               | 305 | 8 7/8 | 223 | 34 7/8 | 886 | 29 1/8                           | 740 |
| 10" 475ST  | 250 | 29       | 737                     | 38 3/4           | 984  | 35 3/4                       | 910  | 45 5/8            | 1159 | 12                  | 305 | 24 3/4         | 630 | 13                               | 330 | 8 7/8 | 223 | 32 3/4 | 832 | 32 3/4                           | 832 |
| 10" 475STV | 250 | 29       | 770                     | 45 7/8           | 1165 | 39 13/16                     | 1011 | 45 5/8            | 1159 | 12                  | 305 | 24 3/4         | 630 | 13                               | 330 | 8 7/8 | 223 | 38 3/4 | 984 | 35 3/4                           | 908 |

Zurn Industries, LLC | Wilkins

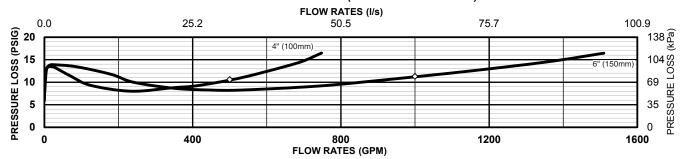
1747 Commerce Way, Paso Robles, CA U.S.A. 93446 Ph. 855-663-9876, Fax 805-238-5766

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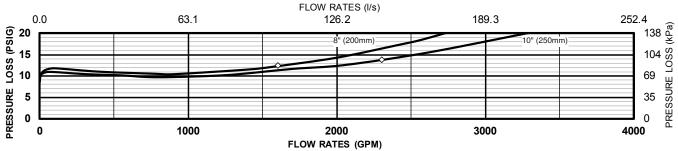
7900 Goreway Drive, Unit 10, Brampton, Ontario L6T 5W6, 877-892-5216 www.zurn.com

Rev. G Date: 12/19 Document No. BF-475STR Product No. Model BF-475STR

#### 475STR & 475STRV 4" & 6" (STANDARD & METRIC)



# 475STR & 475STRV 8" & 10 (STANDARD & METRIC)

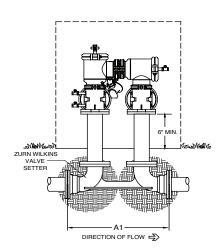


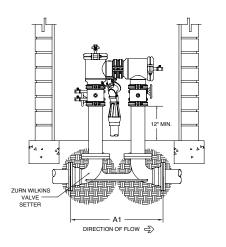
### **Typical Installation**

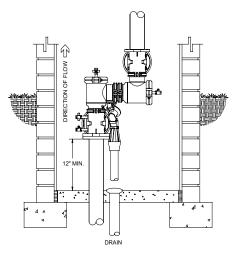
Local codes shall govern installation requirements. To be installed in accordance with the manufacturers' instructions and the latest edition of the Uniform Plumbing Code. Unless otherwise specified, the assembly shall be mounted above adequate drains with sufficient side clearance for testing and maintenance.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

| Сар          | Capacity thru Schedule 40 Pipe (GPM) |            |           |           |  |  |  |  |  |  |  |
|--------------|--------------------------------------|------------|-----------|-----------|--|--|--|--|--|--|--|
| Pipe<br>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      |  |  |  |  |  |  |  |
| 12"          | 1763                                 | 2644       | 3525      | 5288      |  |  |  |  |  |  |  |

|     |           | DIMENSIONS (approx.)   |      |                                |      |  |  |  |  |  |
|-----|-----------|------------------------|------|--------------------------------|------|--|--|--|--|--|
|     | DEL<br>ZE | A1 SET<br>END<br>END I | ТО   | A1 SETTER<br>END TO END<br>MJS |      |  |  |  |  |  |
| in. | mm        | in.                    | mm   | in.                            | mm   |  |  |  |  |  |
| 4   | 100       | 31 5/16                | 795  | 29.313                         | 745  |  |  |  |  |  |
| 6   | 150       | 34 3/4                 | 884  | 32.75                          | 832  |  |  |  |  |  |
| 8   | 200       | 47                     | 1194 | 44.625                         | 1133 |  |  |  |  |  |
| 10  | 250       | 51                     | 1295 | 47                             | 1194 |  |  |  |  |  |







**OUTDOOR INSTALLATION** 

INDOOR INSTALLATION

**VERTICAL INSTALLATION** 

#### **Specifications**

The Reduced Pressure Principle Backflow Prevention Assembly shall be certified to NSF/ANSI 61, ASSE® Listed 1013, and supplied with full port gate valves. The main body, spool, 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 Principle Backflow Prevention Assembly shall be a ZURN WILKINS Model 475STR

1747 Commerce Way, Paso Robles, CA U.S.A. 93446 Ph. 855-663-9876, Fax 805-238-5766