

### Application

Designed for 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 475 is for applications requiring vertical flow up and vertical flow down. The Model 475V is for applications requiring vertical flow up. Ideal for use where lead-free\* valves are required.

### Standards Compliance

- ASSE® Listed 1013
  - AWWA Compliant C511, and C550
  - CSA® Certified
  - IAPMO® Listed
  - UL® Classified
  - C-UL® Classified
  - FM® Approved
  - NYC MEA 468-99-M VOL 4
  - Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California
  - NSF® Listed-Standard 61, Annex G\*
- \*(0.25% MAX. WEIGHTED AVERAGE LEAD CONTENT)

### Materials

|                 |  |
|-----------------|--|
| Main valve body | Ductile Iron ASTM A 536 Grade 4                    |
| Access covers   | Ductile Iron ASTM A 536 Grade 4                    |
| Coatings        | FDA Approved fusion epoxy finish                   |
| Internals       | Stainless steel, 300 Series<br>NORYL™, NSF Listed  |
| Fasteners       | Stainless Steel, 300 Series                        |
| Elastomers      | EPDM (FDA approved)<br>Buna Nitrile (FDA approved) |
| Polymers        | NORYL™, NSF Listed                                 |
| Springs         | Stainless steel, 300 series                        |
| Sensing line    | Stainless steel, braided hose                      |

### Features

|  |              |
|--|--------------|
| Sizes:                                   | 2 1/2", 3"   |
| Maximum working water pressure           | 175 PSI      |
| Maximum working water temperature        | 140°F        |
| Hydrostatic test pressure                | 350 PSI      |
| End connections (Grooved for steel pipe) | AWWA C606-87 |
| (Flanged)                                | ANSI B16.1   |
|  | Class 125    |



### Options

#### (Suffixes can be combined)

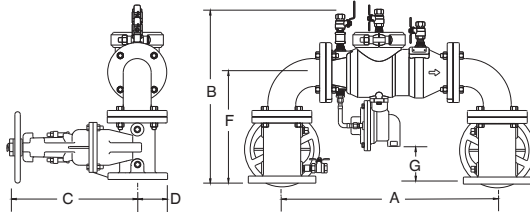
- with NRS shut-off valves (standard)
- FS - with cast iron wye type strainer (flanged only)
- FSC - with epoxy coated wye type strainer (flanged only)
- G - with groove end gate valves
- FG - with flanged inlet gate connection and grooved outlet gate connection
- L - less shut-off valves (flanged body connections)
- OSY - with OS & Y gate valves
- MS - with Integral Relief Valve Monitor Switch
- V - vertical flow up configuration

### Accessories

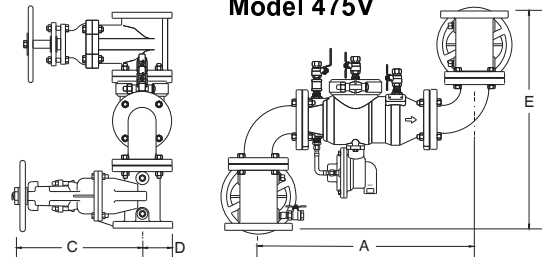
- Repair kit (rubber only)
- Thermal expansion tank (Model XT)
- Valve setter (Model FLS or MJS or MJFS)
- Gate valve tamper switch (OSY-40)
- Air gap (Use Model AG-6)
- QT-SET Quick Test Fitting Set
- Electronic Solenoid Timer (Model EST)

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

**Model 475**



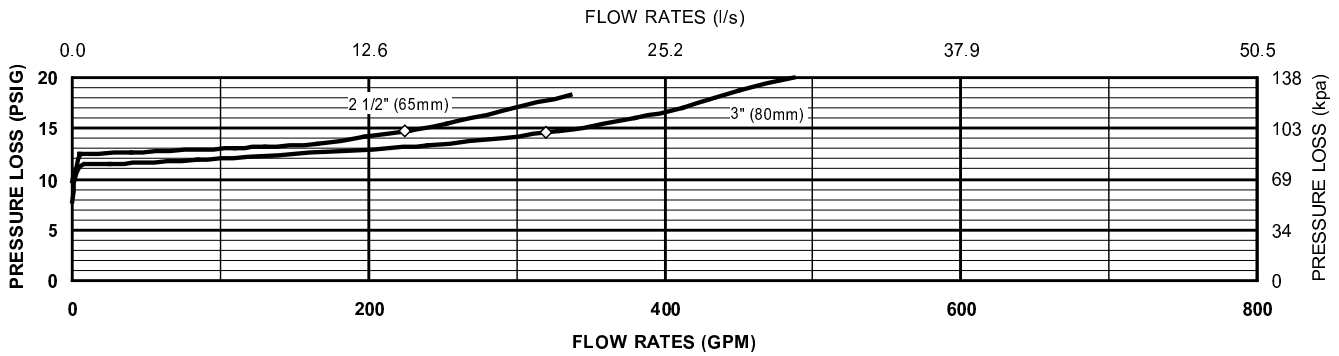
**Model 475V**



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

| MODEL SIZE | DIMENSIONS (approximate) |    |     |    |             |     |               |     |            |    |     |     |     |     |     |    |     |    | WEIGHT              |     |                      |    |                       |     |   |      |     |     |      |     |       |     |      |
|------------|--------------------------|----|-----|----|-------------|-----|---------------|-----|------------|----|-----|-----|-----|-----|-----|----|-----|----|---------------------|-----|----------------------|----|-----------------------|-----|---|------|-----|-----|------|-----|-------|-----|------|
|            | A                        |    | B   |    | C OS&C OPEN |     | C OS&Y CLOSED |     | C NRS GATE |    | D   |     | E   |     | F   |    | G   |    | WITHOUT GATE VALVES |     | WITH NRS GATE VALVES |    | WITH OS&Y GATE VALVES |     |   |      |     |     |      |     |       |     |      |
|            | in.                      | mm | in. | mm | in.         | mm  | in.           | mm  | in.        | mm | in. | mm  | in. | mm  | in. | mm | in. | mm | lbs.                | kg  | lbs.                 | kg | lbs.                  | kg  |   |      |     |     |      |     |       |     |      |
| 2 1/2      | 65                       | 26 | 660 | 20 | 1/2         | 521 | 16            | 3/8 | 416        | 13 | 7/8 | 352 | 11  | 3/8 | 289 | 3  | 3/4 | 95 | 26                  | 1/8 | 664                  | 13 | 1/8                   | 333 | 4 | 1/8  | 105 | 87  | 39.5 | 196 | 88.9  | 205 | 93.1 |
| 3          | 80                       | 27 | 686 | 21 | 1/2         | 546 | 18            | 7/8 | 479        | 15 | 5/8 | 397 | 12  | 3/8 | 314 | 3  | 3/4 | 95 | 27                  | 1/8 | 689                  | 13 | 9/16                  | 345 | 4 | 9/16 | 116 | 112 | 50.8 | 234 | 106.2 | 240 | 109  |

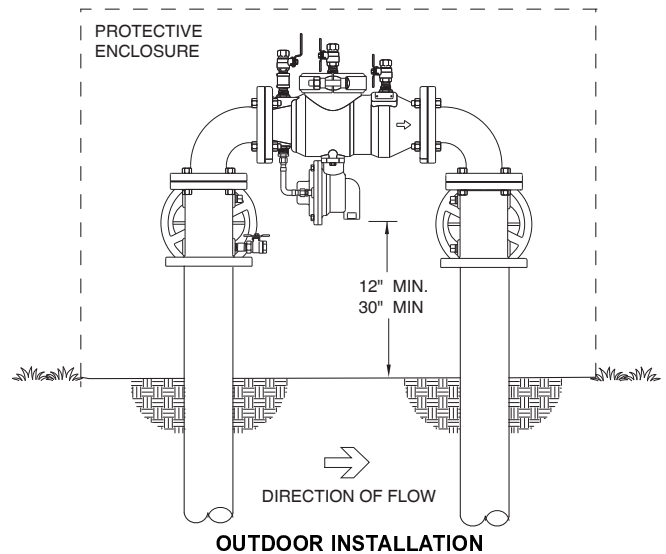
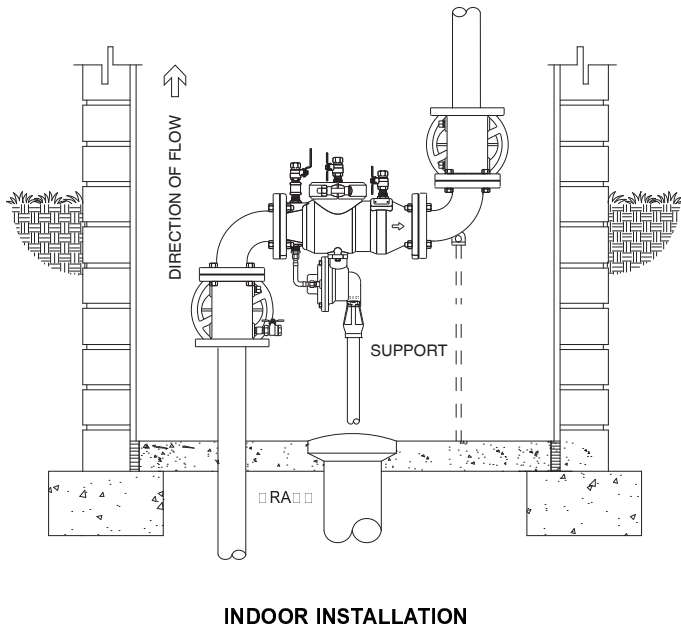
**MODEL 475 & 475V 2 1/2" & 3" (STANDARD & METRIC)**



**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 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.

| 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      |



**Specifications**

The Reduced Pressure Principle Backflow Preventer shall be ASSE® Listed 1013, and supplied with full port gate valves. The main body and access covers shall be epoxy coated ductile iron (ASTM A 536 Grade 4), 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. Center stem guided design shall incorporate two torsion springs to bias the check in the closed position. The first and second checks shall be accessible for maintenance without removing the relief valve or the entire device from the line. If installed indoors, the installation shall be supplied with an air gap adapter. The Reduced Pressure Principle Backflow Preventer shall be a ZURN WILKINS Model 475 or 475V.