

Application

Designed for installation on water lines in fire protection systems to protect against both backsiphonage and backpressure of polluted water into the potable water supply. Model 350DA shall provide protection where a potential health hazard does not exist. Incorporates metered by-pass to detect leaks and unauthorized water use.

Standards Compliance

(Sizes 2 1/2" - 10" Horiz. & Vert.)
(12" Horizontal Only)

- ASSE® Listed 1048 (Sizes 2 1/2" thru 12")
- CSA® Certified B64.5 (Sizes 2 1/2" thru 8", & 12")
- AWWA Compliant C510 (Sizes 2 1/2" thru 12"), and C550
- UL® Classified (Sizes 2 1/2" thru 12")
- C-UL® Classified (Sizes 2 1/2" thru 12")
- FM® Approved (Sizes 2 1/2" thru 10")
- NYC MEA 147-99-M Vol 4 (2-1/2" - 10")
- Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California (Sizes 2 1/2" thru 12")

- NSF® Listed-Standard 61, Annex G*
*(0.25% MAX. WEIGHTED AVERAGE LEAD CONTENT)

By-Pass Backflow Assembly 3/4" Model 950XLD

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 NORYL™, NSF Listed |
| Fasteners | Stainless Steel, 300 Series |
| Elastomers | EPDM (FDA approved) Buna Nitrile (FDA approved) |
| Polymers | NORYL™, NSF Listed |
| Springs | Stainless Steel, 300 Series |

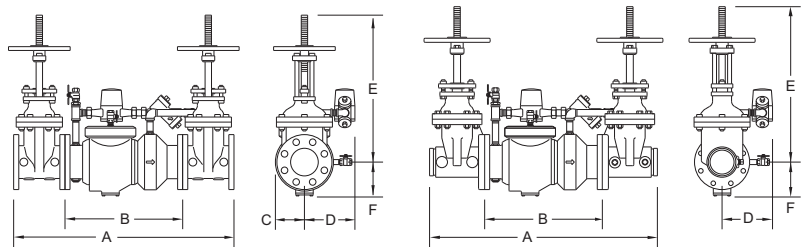
Features

| | |
|-------------------------------------|-----------------------------------|
| Sizes: | 2 1/2", 3", 4", 6", 8", 10", 12" |
| Maximum working water pressure | 175 PSI |
| Maximum working water temperature | 140°F |
| Hydrostatic test pressure | 350 PSI |
| End connections (Grooved for steel) | AWWA C606 ANSI B16.1 Class 125 |
| | (Flanged) |

Attention:

Model 350DA (flange body) and Model 350ADA (grooved body) have different lay lengths.

Dimensions & Weights (do not include pkg.)



| MODEL 350DA SIZE | DIMENSION (approximate) | | | | | | | | | | | | | | WEIGHT | | | | |
|------------------------|-------------------------|--------|--------------------------|--------|-----|-------|-----|--------|----------------|--------|---------------------|--------|------|-------|----------------------------|-----|-----------------------------|------|-------|
| | A | | B LESS GATE VALVES | | C | | D | | E OS&Y OPEN | | E OS&Y CLOSED | | F | | WITHOUT GATES VALVES | | WITH OS&Y GATE VALVES | | |
| | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | lbs. | kg | lbs. | kg | |
| 2 1/2 | 65 | 31 | 787 | 15 7/8 | 403 | 3 3/4 | 95 | 9 | 229 | 16 3/8 | 416 | 13 7/8 | 352 | 3 1/2 | 89 | 68 | 30.9 | 178 | 80.8 |
| 3 | 80 | 32 | 813 | 15 7/8 | 403 | 3 3/4 | 95 | 9 | 229 | 18 7/8 | 479 | 15 5/8 | 397 | 3 1/2 | 89 | 68 | 30.9 | 198 | 90 |
| 4 | 100 | 37 5/8 | 956 | 19 1/2 | 495 | 4 1/2 | 114 | 9 | 229 | 22 3/4 | 578 | 18 1/4 | 464 | 6 | 152 | 106 | 48 | 296 | 134.4 |
| 6 | 150 | 44 3/4 | 1137 | 23 1/2 | 597 | 5 1/2 | 140 | 10 1/2 | 267 | 30 1/8 | 765 | 23 3/4 | 603 | 7 | 178 | 180 | 81.7 | 480 | 217.9 |
| 8 | 200 | 60 3/4 | 1543 | 37 3/4 | 959 | 10 | 254 | 12 | 305 | 37 3/4 | 959 | 29 1/4 | 743 | 8 1/2 | 216 | 374 | 170 | 850 | 385.9 |
| 10 | 250 | 63 3/4 | 1619 | 37 3/4 | 959 | 10 | 254 | 12 | 305 | 45 3/4 | 1162 | 35 3/8 | 899 | 8 1/2 | 216 | 404 | 183 | 1222 | 554.8 |
| 12 | 300 | 66 1/4 | 1683 | 38 | 965 | 10 | 254 | 12 | 305 | 53 1/8 | 1349 | 40 5/8 | 1032 | 8 7/8 | 226 | 463 | 210 | 1623 | 736.2 |



Certified to
NSF/ANSI 61-G

Options

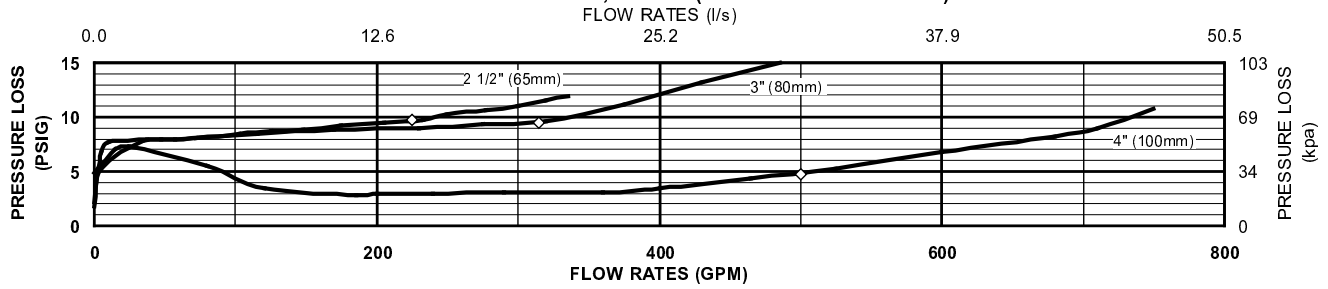
(Suffixes can be combined)

- with OS & Y gate valves (standard)
- L - less shut-off valves (flanged body connections)
- LM - less water meter
 - with remote reading meter
 - with gallon meter (standard)
- CFM - with cu ft meter
- CMM - with cu meter meter
- G - with groove end gate valves
- FG - with flanged inlet gate connection and grooved outlet gate connection
- PI - with Post Indicator Gate Valve (3"-10")

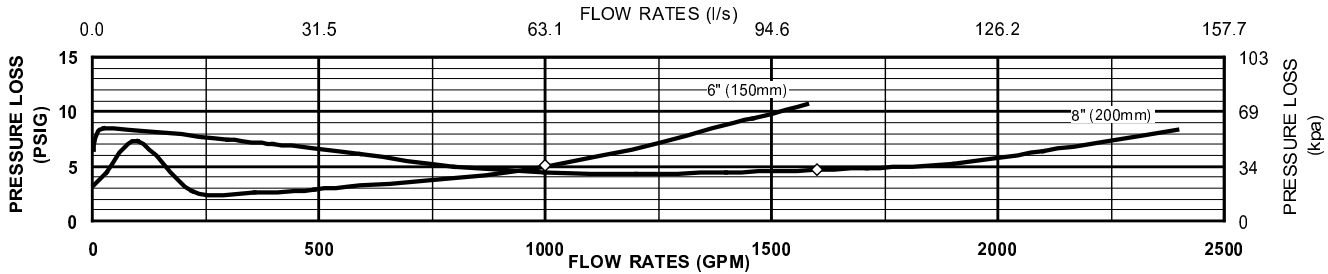
Accessories

- Repair kit (rubber only)
- Thermal expansion tank (Model XT)
- OS & Y Gate valve tamper switch (OSY-40)

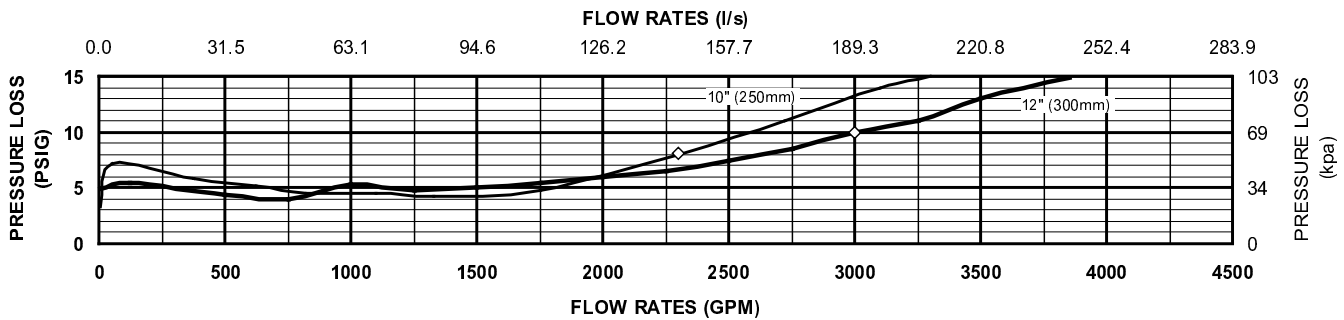
MODEL 350DA 2 1/2", 3" & 4" (STANDARD & METRIC)



MODEL 350DA 6" & 8" (STANDARD & METRIC)



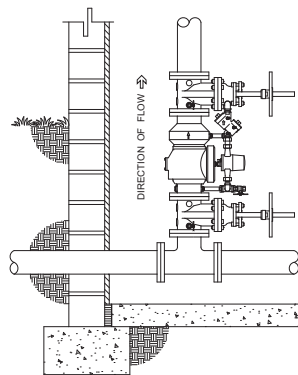
MODEL 350DA 10" & 12" (STANDARD & METRIC)



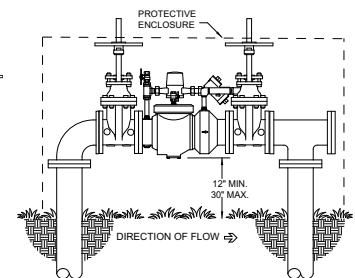
Typical Installation

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.

| 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 |
| 12" | 1763 | 2644 | 3525 | 5288 |



VERTICAL INSTALLATION



OUTDOOR INSTALLATION

Specifications

The Double Check Detector Backflow Prevention Assembly shall be ASSE® Listed 1048, and supplied with full port gate valves. The main body and access cover shall be epoxy coated ductile iron (ASTM A 536 Grade 4), the seat ring and check valve shall be Noryl™ (NSF Listed), the stem shall be stainless steel (ASTM A 276) and the seat disc elastomers shall be EPDM. The first and second check valves shall be accessible for maintenance without removing the device from the line. The Double Check Detector Backflow Prevention Assembly shall be a WILKINS Model 350DA.