



# Model 350AR

## Replacement Double Check Valve Assembly

### Application

Designed for drop-in replacement of existing longer lay length assemblies without the need for additional spools or spacers, saving 2 to 6 hours of installation labor and up to 2 machine hours per backflow replacement. A custom sized grooved spool installed between the backflow body and downstream shut-off valve allows customer specified assembly lengths to be shipped directly from the factory. Designed for installation on potable water lines to protect against both backsiphonage and backpressure of polluted water into the potable water supply. The Model 350AR shall provide protection where a potential health hazard does not exist.

### Standards Compliance

- ASSE® Listed 1015
- IAPMO® Listed
- CSA® Certified
- UL® Classified
- C-UL® Classified
- FM® Approved
- Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California
- Meets the requirements of NSF/ANSI 61\*

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

### Materials

|                     |   |
|---------------------|---|
| Main valve body     | Ductile Iron ASTM A 536                 |
| Access covers       | Ductile Iron ASTM A 536                 |
| Coatings            | NSF Approved electrostatic epoxy finish |
| Internals           | Stainless steel, 300 Series NORYL™      |
| Fasteners & Springs | Stainless Steel, 300 Series             |
| Seal ring           | EPDM (FDA approved)                     |
| O-ring              | Buna Nitrile (FDA approved)             |



LEAD FREE



US PATENT NO. 8,997,772  
US PATENT NO. 10,914,391  
PATENT PENDING

### Options (Suffixes can be combined)

- with flanged end NRS gate valves (standard)
- OSY - with flanged end OS&Y gate valves
- PI - Post Indicator gate Valve
- G - with grooved end OS&Y gate valves
- BG - with grooved end butterfly valves with integral supervisory switches
- BF - with flanged end butterfly valves with integral supervisory switches
- 509 - with AWWA C509 gate valves

### Accessories

- Repair kit (rubber only)
- OS & Y GATE valve tamper switch (OSY-40)

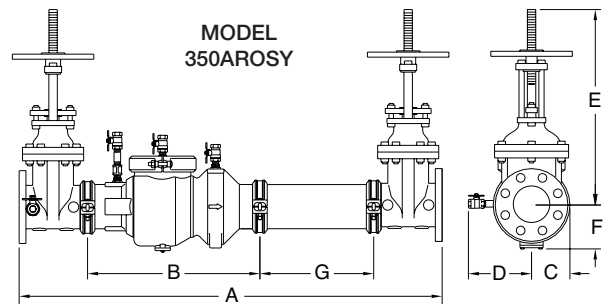
### Features

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

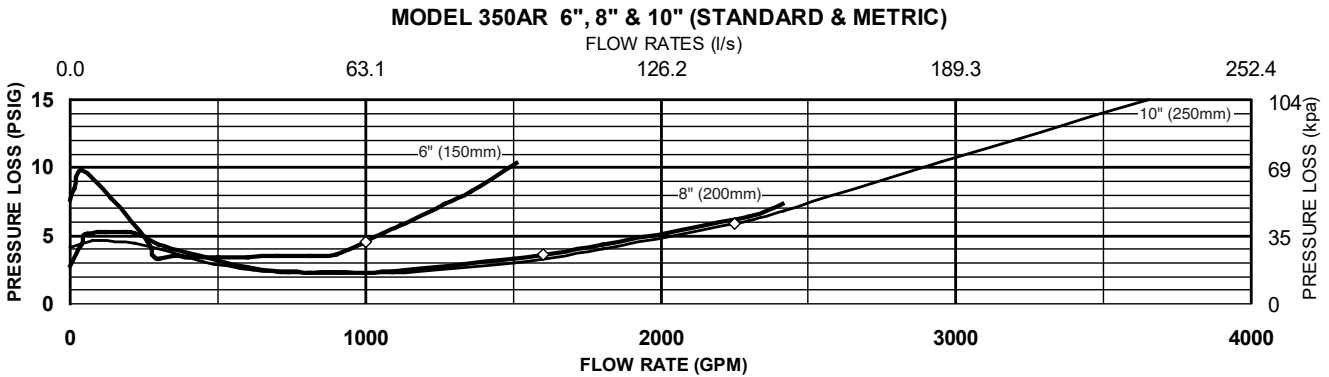
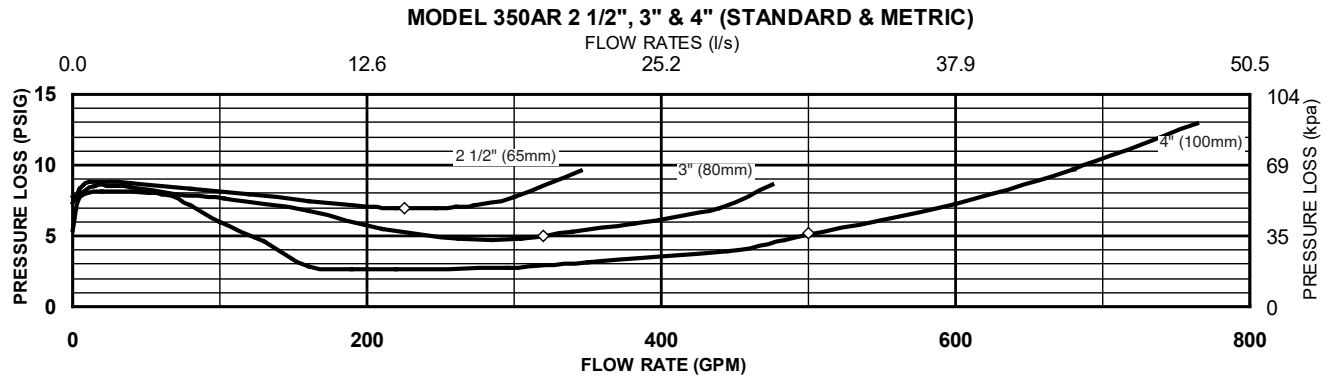
### Dimensions & weights (do not include pkg.)

\*2 1/2" & 3" sizes use 4" body & reducer couplings

| MODEL 350AR SIZE | WEIGHT WITH MAX. SPOOL LENGTH |      |                              |      |                         |      |                         |      |                          |     |                          |     |     |
|------------------|-------------------------------|------|------------------------------|------|-------------------------|------|-------------------------|------|--------------------------|-----|--------------------------|-----|-----|
|                  | WITH NRS GATES FLANGED        |      | WITH NRS GATE VALVES GROOVED |      | OSY GATE VALVES FLANGED |      | OSY GATE VALVES GROOVED |      | BUTTERFLY VALVES FLANGED |     | BUTTERFLY VALVES GROOVED |     |     |
|                  | in.                           | mm   | lbs.                         | kg   | lbs.                    | kg   | lbs.                    | kg   | lbs.                     | kg  | lbs.                     | kg  |     |
| 2 1/2            | 65                            | 190  | 86                           | 180  | 82                      | 208  | 94                      | 198  | 90                       | 188 | 85                       | 177 | 80  |
| 3                | 80                            | 212  | 96                           | 200  | 91                      | 230  | 104                     | 218  | 99                       | 200 | 91                       | 187 | 85  |
| 4                | 100                           | 242  | 110                          | 222  | 101                     | 278  | 126                     | 254  | 115                      | 186 | 84                       | 163 | 74  |
| 6                | 150                           | 384  | 174                          | 354  | 161                     | 442  | 200                     | 420  | 191                      | 286 | 130                      | 256 | 116 |
| 8                | 200                           | 795  | 361                          | 755  | 342                     | 877  | 398                     | 823  | 373                      | 623 | 283                      | 577 | 262 |
| 10               | 250                           | 1087 | 493                          | 1035 | 469                     | 1183 | 537                     | 1125 | 510                      | 819 | 371                      | 761 | 345 |



| MODEL 350AR SIZE | DIMENSION (approximate) |        |         |      |                         |        |        |      |      |        |     |       |     |       |             |        |               |        |            |        |                   |        |     |       |                |       |     |    |     |
|------------------|-------------------------|--------|---------|------|-------------------------|--------|--------|------|------|--------|-----|-------|-----|-------|-------------|--------|---------------|--------|------------|--------|-------------------|--------|-----|-------|----------------|-------|-----|----|-----|
|                  | A WITH GATE VALVES      |        |         |      | A WITH BUTTERFLY VALVES |        |        |      | B    |        | C   |       | D   |       | E OS&Y OPEN |        | E OS&Y CLOSED |        | E NRS GATE |        | E BUTTERFLY VALVE |        | F   |       | G SPOOL LENGTH |       |     |    |     |
|                  | in.                     | mm     | in.     | mm   | in.                     | mm     | in.    | mm   | in.  | mm     | in. | mm    | in. | mm    | in.         | mm     | in.           | mm     | in.        | mm     | in.               | mm     | in. | mm    | in.            | mm    | in. | mm |     |
| 2 1/2            | 65                      | 37 1/8 | 47 1/8  | 943  | 1197                    | 34 1/8 | 44 1/8 | 867  | 1121 | 20 1/8 | 511 | 4 1/2 | 114 | 7 1/4 | 184         | 17 3/4 | 451           | 15 3/8 | 391        | 11 1/2 | 292               | 8 1/4  | 210 | 6     | 152            | 2     | 12  | 51 | 305 |
| 3                | 80                      | 38 1/8 | 48 1/8  | 968  | 1222                    | 34 5/8 | 44 5/8 | 879  | 1133 | 20 1/8 | 511 | 4 1/2 | 114 | 7 1/4 | 184         | 20 1/4 | 514           | 17     | 432        | 12 3/4 | 324               | 8 1/2  | 216 | 6     | 152            | 2     | 12  | 51 | 305 |
| 4                | 100                     | 40 1/2 | 62 1/4  | 1029 | 1581                    | 35 3/4 | 57 1/2 | 908  | 1461 | 19 7/8 | 505 | 4 1/2 | 114 | 8     | 203         | 22 1/2 | 572           | 18 1/4 | 464        | 14 1/2 | 368               | 9      | 229 | 6     | 152            | 2 1/4 | 24  | 57 | 610 |
| 6                | 150                     | 49 1/2 | 71 1/4  | 1257 | 1810                    | 42 1/2 | 64 1/4 | 1080 | 1632 | 25 7/8 | 657 | 5 1/2 | 140 | 10    | 254         | 30 1/2 | 775           | 24 1/4 | 616        | 18     | 457               | 10 1/4 | 260 | 7     | 178            | 2 1/4 | 24  | 57 | 610 |
| 8                | 200                     | 64 7/8 | 86      | 1648 | 2184                    | 57 7/8 | 79     | 1470 | 2007 | 38 1/2 | 978 | 10    | 254 | 11    | 279         | 37     | 940           | 28 1/2 | 724        | 22 1/8 | 537               | 12     | 305 | 8 1/2 | 216            | 2 7/8 | 24  | 73 | 610 |
| 10               | 250                     | 67 3/8 | 100 5/8 | 1711 | 2556                    | 61 7/8 | 94 5/8 | 1572 | 2403 | 38 1/2 | 978 | 10    | 254 | 12    | 305         | 45 5/8 | 1159          | 34 3/4 | 883        | 24 3/4 | 626               | 13     | 330 | 8 1/2 | 216            | 2 3/4 | 36  | 70 | 914 |



**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.

**ORDER CONFIGURATION**

- Exact in field measurements are required when ordering the assembly. Please have the assembly length ready when ordering.
- All assemblies are custom made to order and all sales are final.
- Lead time is approximately one week.

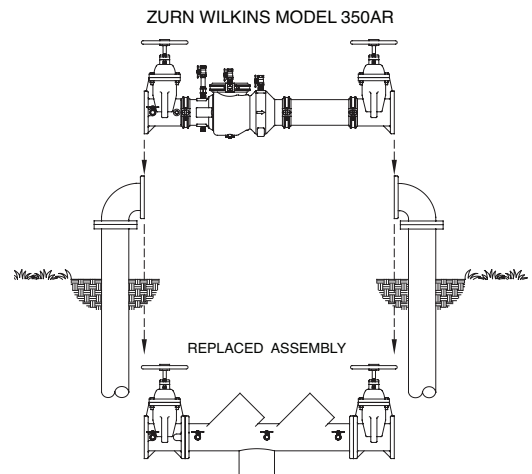
Generic part number used for ordering:

**X-350AR\*-A**

where X= NOMINAL VALVE SIZE (212 REPRESENTS 2-1/2")  
 \*= ADDED OPTIONS (use suffixes designated in OPTIONS section on previous page)

**EXAMPLE**

To order a 4" Model 350 AR with OS&Y gate valves and an assembly length of 52 3/8", the part number would be 4-350AROSY-A. The length of 52 3/8" must be given to Customer Service.



| VALVE SIZE | MINIMUM FACE TO FACE DIMENSIONS (OVERALL LAY LENGTH) |                  | MAXIMUM LENGTHS |
|------------|--|------------------|-----------------|
|            | DUCTILE IRON GROOVED BODY                            |                  |                 |
|            | GATE VALVES  | BUTTERFLY VALVES |                 |
| 2-1/2"     | 37-1/8"  | 34-1/8"          | 47-1/8"         |
| 3"         | 38-1/8"  | 34-5/8"          | 48-1/8"         |
| 4"         | 40-1/2"  | 35-3/4"          | 62-1/4"         |
| 6"         | 49-1/2"  | 42-1/2"          | 71-1/4"         |
| 8"         | 64-7/8"  | 57-7/8"          | 86"             |
| 10"        | 67-3/8"  | 61-7/8"          | 100-5/8"        |

**SPECIFICATIONS**

The Double Check Backflow Prevention Assembly shall be certified to NSF/ANSI 61, ASSE® Listed 1015, 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 shall be accessible for maintenance without removing the device from the line. The Double Check Backflow Prevention Assembly used for all backflow replacements shall be a ZURN WILKINS Model 350AR.