

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

Standards Compliance (Horizontal & Vertical)

- ASSE® Listed 1048
- AWWA Compliant C511 (with gates only), and C550
- IAPMO® Listed
- CSA® Certified B64.5
- UL® Classified
- C-UL® Classified
- FM® Approved
- 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)

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 electrostatic epoxy finish
Internals	Stainless steel, 300 Series NORYL™, NSF Listed
Fasteners & springs	Stainless Steel, 300 Series
Elastomers	EPDM (FDA approved) Buna Nitrile (FDA approved)
Polymers	NORYL™, NSF Listed

Dimensions & Weights (do not include pkg.)

MODEL 350ADAR SIZE	WEIGHT W/MAX. SPOOL LENGTH									
			OS&Y GATES VALVES FLANGED		OS&Y GATE VALVES GROOVED		BUTTERFLY VALVES FLANGED		BUTTERFLY VALVES GROOVED	
	in.	mm	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg
2 1/2	65	228	104	218	99	208	95	198	90	
3	80	248	112	236	107	218	99	205	93	
4	100	285	129	261	119	194	88	171	77	
6	150	443	201	421	191	288	131	257	117	
8	200	874	396	820	372	620	281	574	260	
10	250	1156	524	1098	498	792	359	734	333	



PATENT PENDING

Options

(Suffixes can be combined)

- with flanged end OS & Y gate valves (standard)
- LM - less water meter
- with remote reading meter
- with gallon meter (standard)
- CFM - with cu ft meter
- CMM - with cu meter meter
- PI - with Post Indicator Gate Valves
- 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

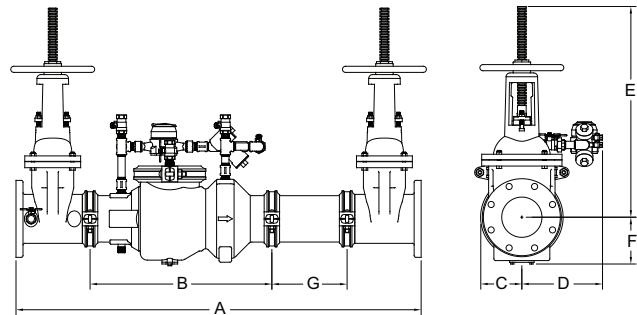
Accessories

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

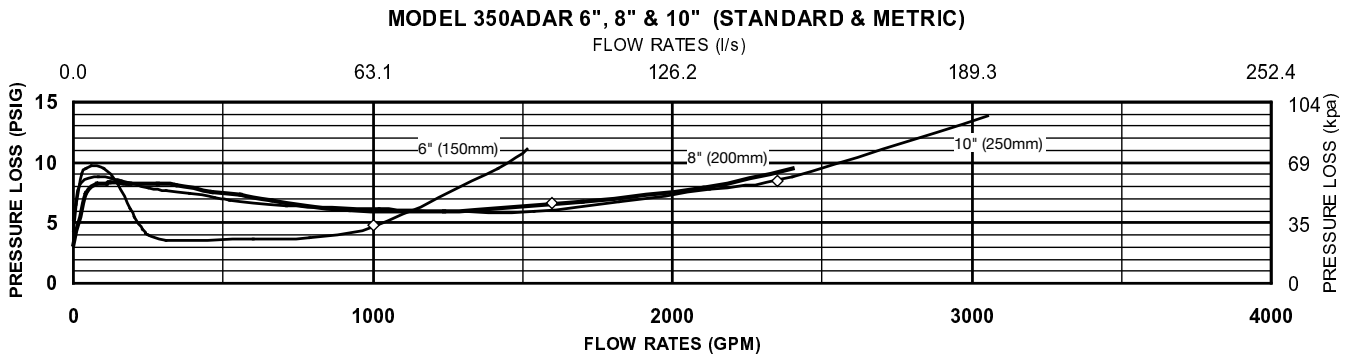
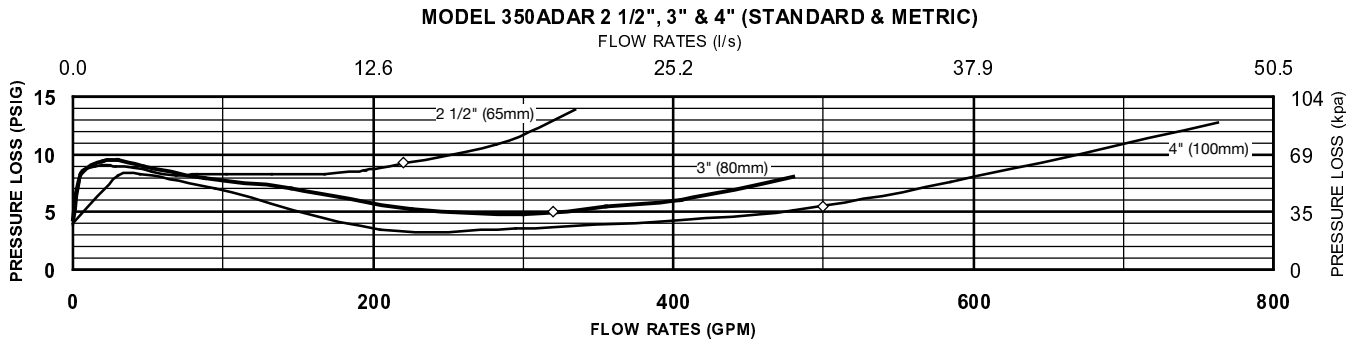
Features

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

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



MODEL 350ADAR SIZE	DIMENSION (approximate)																										
	A WITH GATE VALVES				A WITH BUTTERFLY VALVES				B		C		D		E OS&Y OPEN		E OS&Y CLOSED		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	
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	9	229	17 3/4	451	15 3/8	391	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	9	229	20 1/4	514	17	432	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	9	229	22 1/2	572	18 1/4	464	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 1/2	267	30 1/2	775	24 1/4	616	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	12	305	37	940	28 1/2	724	12	305	8 1/2	216	2 7/8	24	73	610
10	250	67 3/8	100 5/8	1711	2556	61 3/8	94 5/8	1559	2403	38 1/2	978	10	254	12	305	45 5/8	1159	34 3/4	883	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

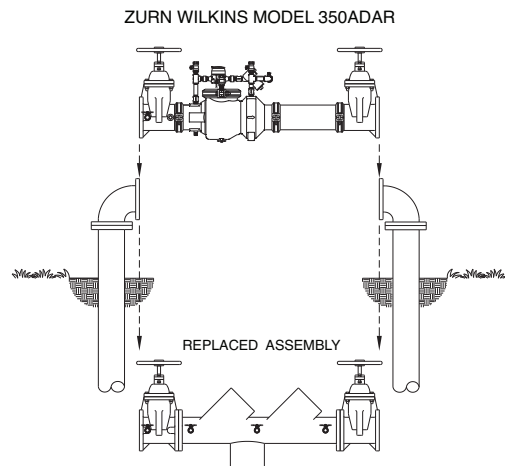
- Exact in field measurements are required when ordering the assembly. Please have the assembly length ready when ordering.
- All assemblies are custom made to order and all sales are final.
- Lead time is approximately one week.

Generic part number used for ordering:
X-350ADAR*-Y

where X= NOMINAL VALVE SIZE (212 REPRESENTS 2-1/2")
Y= ASSEMBLY LENGTH SUFFIX: choose A-C from table at right (exact in field measurements must be given to customer service representative)
*= ADDED OPTIONS (use suffixes designated in OPTIONS section on previous page)

Example

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



ASSEMBLY LENGTH SUFFIX						
NPS	A		B		C	
	From	To	From	To	From	To
2-1/2"	34 1/8"	47 1/8"				
3"	35 5/8"	48 1/8"				
4"	35 3/4"	50"	50 1/16"	62 1/4"		
6"	42 1/2"	59"	59 1/16"	71 1/4"		
8"	57 7/8"	74"	74 1/16"	86"		
10"	61 3/8"	77"	77 1/16"	89"		

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 ZURN WILKINS Model 350ADAR.