

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 350ASTDA shall provide protection where a potential health hazard does not exist. Incorporates metered by-pass to detect leaks and unauthorized water use. Utilizes a by-pass backflow assembly 3/4" Model 950XLD.



Standards Compliance

(Horizontal and Vertical)

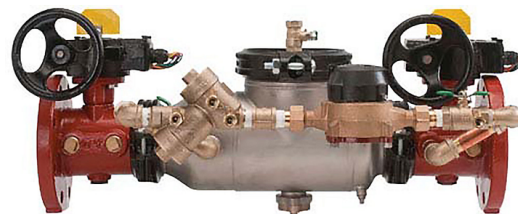
- ASSE® Listed 1048
 - AWWA Compliant C510 (with gates only) and C550
 - UL® Classified
 - C-UL® Classified
 - FM® Approved
 - CSA® Certified B64.5
 - Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California
 - Meets the requirements of NSF/ANSI/CAN 61 and 372*
- *(0.25% MAX. WEIGHTED AVERAGE LEAD CONTENT)

Materials

Main Valve Body	304L Stainless Steel
Access Covers	304L Stainless Steel
Elastomers	Buna Nitrile (FDA approved) EPDM (FDA approved)
Fasteners	300 series Stainless Steel
Internals	300 series Stainless Steel NORYL™
Polymers	NORYL™
Springs	300 series Stainless Steel

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 (Grooved for steel pipe)	AWWA C606
End connections (Flanged)	ANSI/ASME B16.42 Class 150



4" 350ASTDABF

Options (Suffixes can be combined)

- ☐ With flanged end OS&Y gate valves (standard)
- ☐ With gpm meter (standard)
- ☐ **LM** Less water meter
- ☐ **CFM** With cu ft/min meter
- ☐ **CMM** With cu meter/min
- ☐ **PI** With post indicator gate valves
- ☐ **BG** With grooved end butterfly valves with integral supervisory switches
- ☐ **RV** With by-pass on right hand side
- ☐ **BF** With flanged end butterfly valves with integral supervisory switches
- ☐ **G** With grooved end connections
- ☐ **FG** With flanged inlet gate connection and grooved outlet gate connection

Accessories

- ☐ [Repair Kits \(2-1/2" - 10"\)](#)
- ☐ Thermal Expansion Tank [XT](#)
- ☐ OSY Gate Valve Supervisory Switch [OSY-40](#)

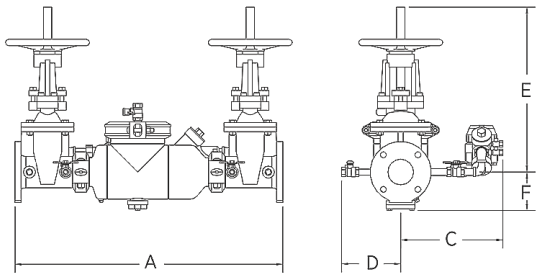
Suggested Pairing

- ☐ Fire Protection Pressure Reducing Valve [ZW209FP](#)
- ☐ Hose Valve [ZW5000](#)
- ☐ Floor Control - Sprinkler Valve [ZW5004](#)

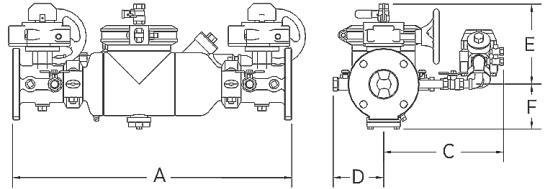
Dimensions & Weights (do not include pkg.)

MODEL 350ASTDA SIZE		WEIGHT							
		WITH OS&Y GATES (GXF)		WITH OS&Y GATES (GXG)		WITH BUTTERFLY VALVES (GXG)		WITH BUTTERFLY VALVES (FXG)	
in.	mm	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg
2 1/2	65	126	57	116	53	93	42	103	47
3	80	143	65	131	60	97	44	110	50
4	100	218	99	198	90	101	46	123	56
6	150	352	160	322	147	164	74	194	88
8	200	667	303	613	278	350	159	373	169
10	250	885	401	827	375	463	210	521	236

MODEL 350ASTDA



MODEL 350ASTDA with BF option

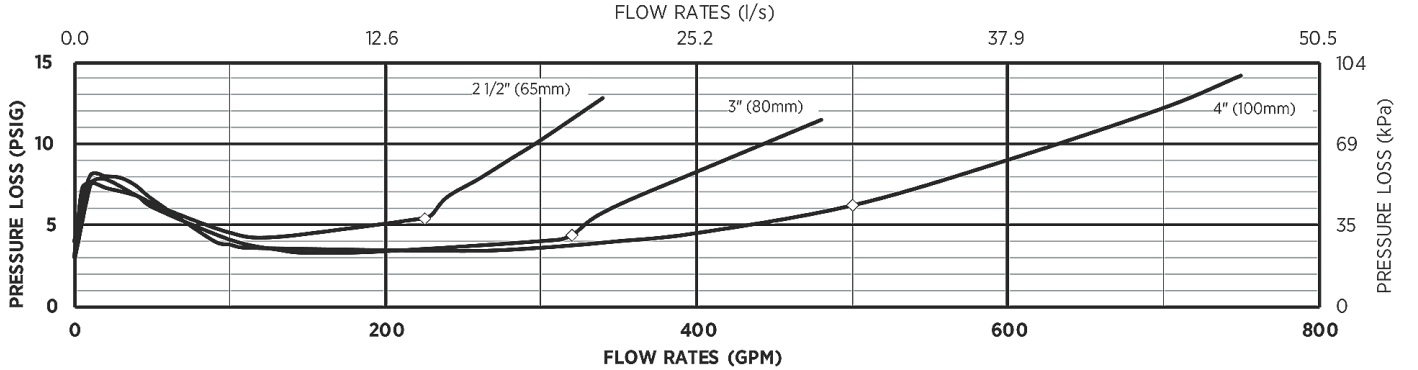


MODEL 350ASTDA SIZE		DIMENSION (approximate)															
		A		A WITH BUTTERFLY VALVES		C		D		E OS&Y OPEN		E OS&Y CLOSED		E WITH BUTTERFLY VALVES		F	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
2 1/2	65	31 7/8	810	28 3/4	730	12	305	7 1/4	184	17 3/4	451	15 3/8	391	8 1/4	210	5	127
3	80	32 7/8	835	29 3/8	746	12	305	7 1/4	184	20 1/4	514	17	432	8 1/4	210	5	127
4	100	34 7/8	886	30 1/4	768	12	305	8	203	22 1/2	572	18 1/4	464	9	229	5	127
6	150	43 1/2	1105	36 1/2	927	10 1/2	267	10	254	30 1/2	775	24 1/4	616	10 1/4	260	6	152
8	200	52 3/4	1340	45 3/4	1162	15 1/8	384	11	279	37	940	28 1/2	724	18 1/2	470	8 3/8	213
10	250	55 3/4	1416	49 3/4	1264	15 1/8	384	12	305	45 5/8	1159	34 3/4	883	18 1/2	470	8 3/8	213

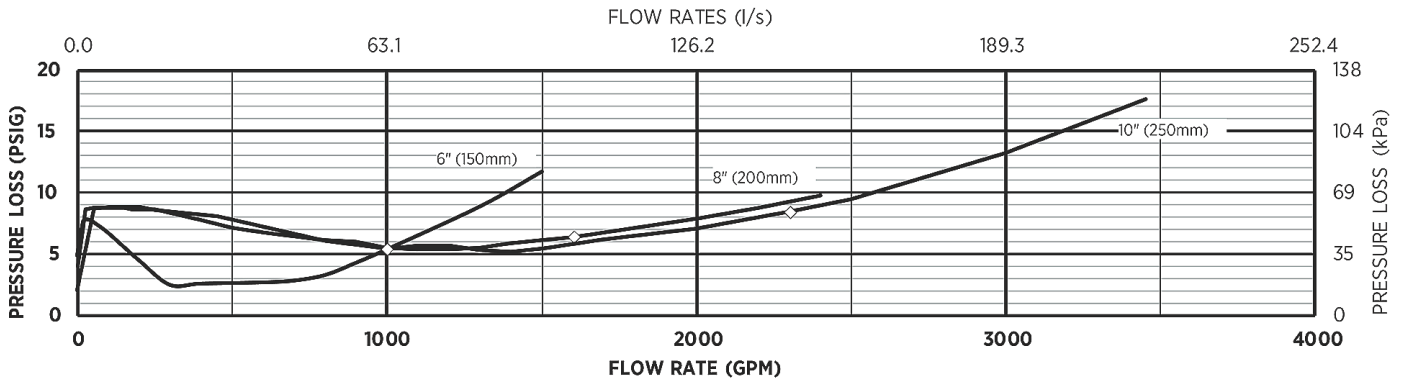
Flow Characteristics

◇ Rated Flow (established by approval agencies)

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

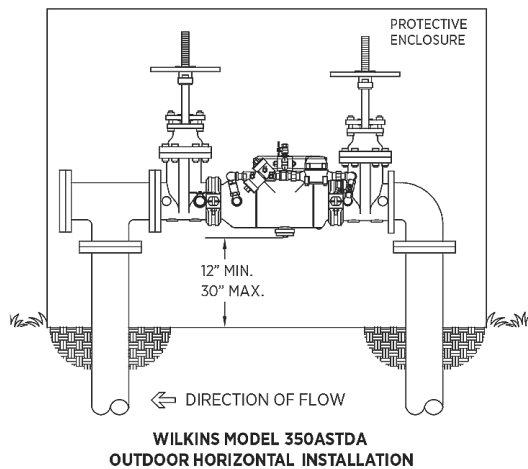


MODEL 350ASTDA 6" 8" & 10" (STANDARD AND METRIC)

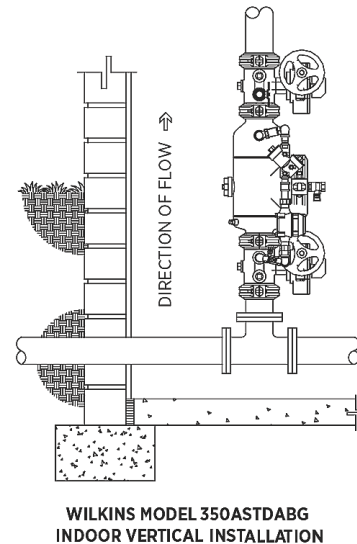


Typical Installation

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	10ft/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



[Installation and Maintenance Instructions 2-1/2" - 6" Model 350ASTDA](#)

[Installation and Maintenance Instructions 8" and 10" Model 350ASTDA](#)

Specifications (350ASTDA Written Specification)

The Double Check Detector Backflow Prevention Assembly shall be certified to NSF/ANSI/CAN 61 and 372, ASSE® Listed 1048, and supplied with full port gate valves. The main body 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 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 350ASTDA.