

# Model 350DA

## Double Check Detector Assembly

### 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)

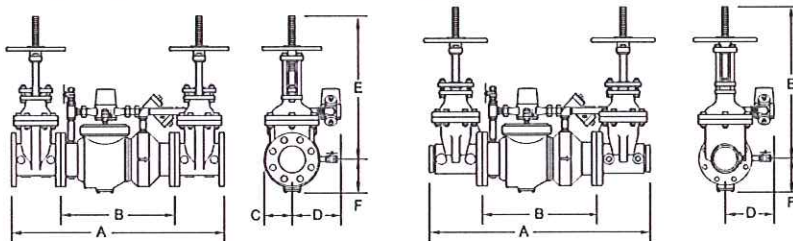
- ASSE® Listed 1048 (Sizes 2 1/2" thru 12")
- CSA® Certified B64.5 (Sizes 2 1/2" thru 8", & 12")
- AWWA Compliant C510 (Sizes 2 1/2" thru 12"), and C550
- UL® Classified (Sizes 2 1/2" thru 12")
- C-UL® Classified (Sizes 2 1/2" thru 12")
- FM® Approved (Sizes 2 1/2" thru 10")
- NYC MEA 147-99-M Vol 4 (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)

### 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

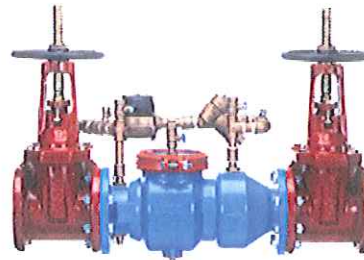
### Features

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
(Flanged)	ANSI B16.1 Class 125



### 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



### Options

(Suffixes can be combined)

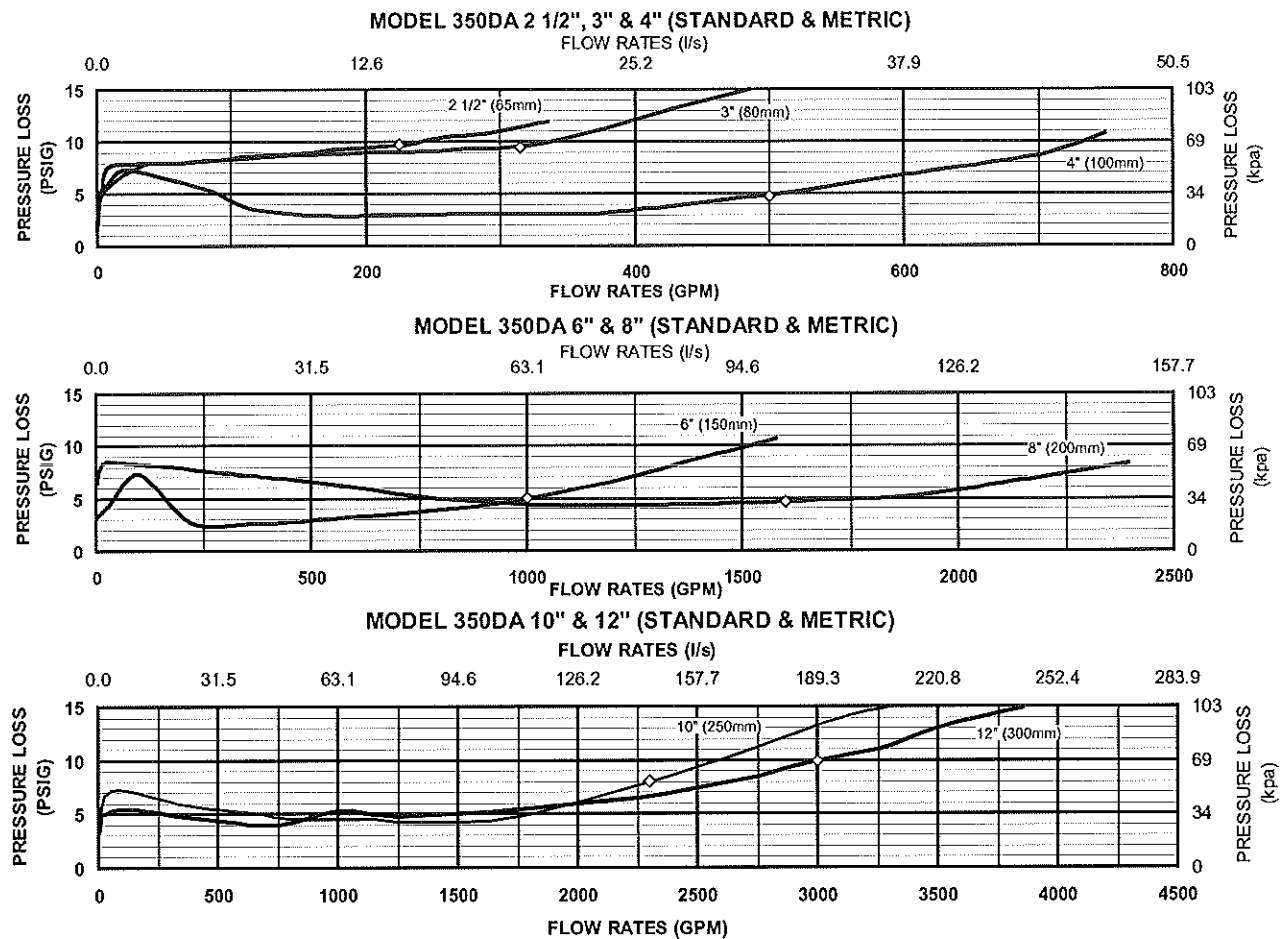
- ☐ - with OS & Y gate valves (standard)
- ☐ L - less shut-off valves (flanged body connections)
- ☐ LM - less water meter
  - with remote reading meter
  - with gallon meter (standard)
- ☐ CFM - with cu ft meter
- ☐ CMM - with cu meter meter
- ☐ G - with groove end gate valves
- ☐ FG - with flanged 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)

### Attention:

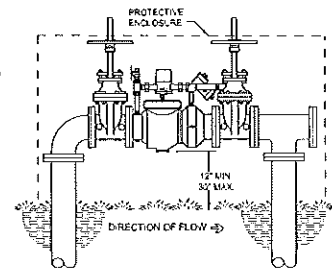
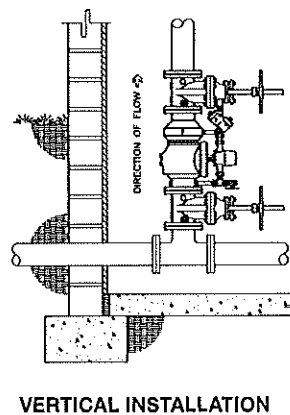
Model 350DA (flange body) and Model 350ADA (grooved body) have different lay lengths.



### 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



### 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.





## Model 950XLT2

### Top Access Double Check Valve Assembly

#### Application

Ideal for use where Lead-Free\* valves are required. Designed for installation on potable water lines to protect against both backsiphonage and backpressure of polluted water into the potable water supply. A test cock plug is provided to protect against fouling caused by insects, dirt and debris. Assembly shall provide protection where a potential non-health hazard exists.

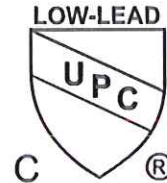
#### Standards Compliance

- (Unless otherwise noted, applies to 3/4" thru 2" Horizontal)
- ASSE® Listed 1015 (Vertical flow-up: 1 1/4" thru 2")
- IAPMO® Listed
- CSA® Certified (Vertical flow-up: 1 1/2" & 2")
- AWWA Compliant C510
- Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California
- NSF® Listed - Standard 61, Annex G\*
- Certified to NSF/ANSI 372\* by IAPMO R&T

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

#### Materials

Main valve body	Low Lead Cast Bronze ASTM B 584
Access covers	Low Lead Cast Bronze ASTM B 584
Fasteners	Stainless Steel, 300 Series
Elastomers	Silicone (FDA approved)
	Buna Nitrile (FDA approved)
Polymers	Noryl™, NSF Listed
Springs	Stainless steel, 300 series
Test cock cover	Plastic



#### Features

Sizes: 3/4", 1", 1 1/4", 1 1/2", 2"

Maximum working water pressure

175 PSI

Maximum working water temperature

180°F

Hydrostatic test pressure

350 PSI

End connections Threaded

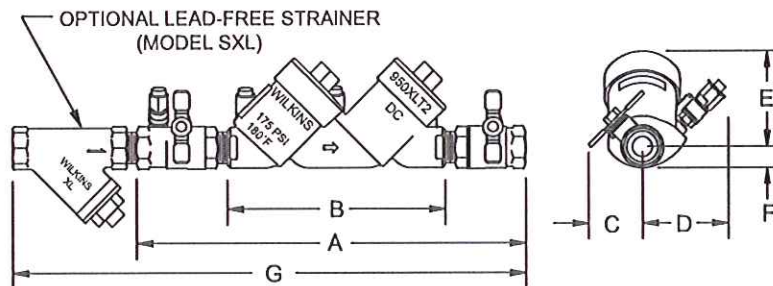
ANSI B1.20.1

#### Options (Suffixes can be combined)

- ☐ FT - with "Fast Test" test cocks
- ☐ S - with Model SXL lead-free bronze "Y" type strainer

#### Accessories

- ☐ Repair kit (rubber only)
- ☐ Thermal expansion tank (Model XT)
- ☐ Stainless steel ball valve handles
- ☐ QT-SET Quick Test Fitting Set



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

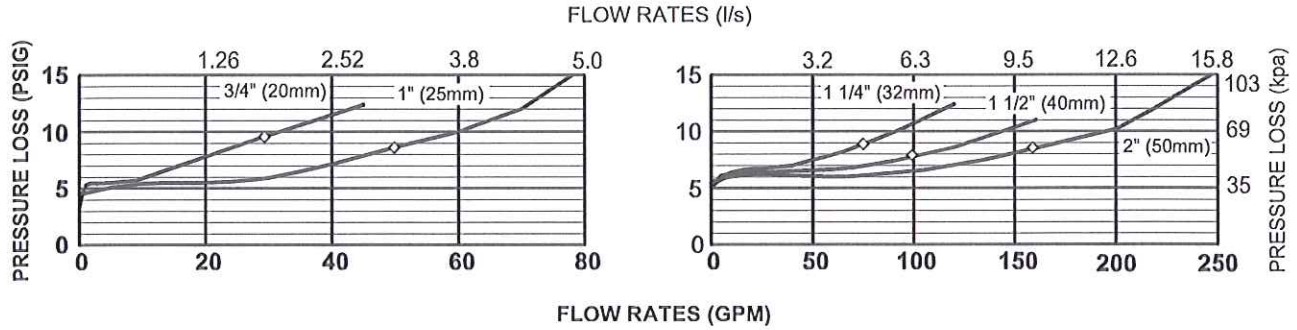
MODEL SIZE		DIMENSIONS (approximate)														WITH BALL VALVES	
		A		B		C		D		E		F		G			
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg
3/4	20	13	330	8 3/4	222	2 3/8	60	2 5/16	59	3 5/16	84	3/4	19	17 5/8	448	6	2.7
1	25	14	356	8 3/4	222	2 1/2	64	2 5/16	59	3 5/16	84	3/4	19	19 3/4	502	12	5.4
1 1/4	32	19 5/8	499	13 3/4	349	4	102	3 5/8	92	4 3/8	111	1 5/16	33	24 3/4	629	22	10
1 1/2	40	20 5/16	516	13 3/4	349	5 3/8	137	3 5/8	92	4 3/8	111	1 5/16	33	25 15/16	659	22	10
2	50	21 3/8	543	13 3/4	349	5 13/16	148	3 5/8	92	4 3/8	111	1 5/16	33	28 5/16	719	29	13.2

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Rev. C  
Date: 12/13  
Document No. BF-950XLT2  
Product No. Model 950XLT2

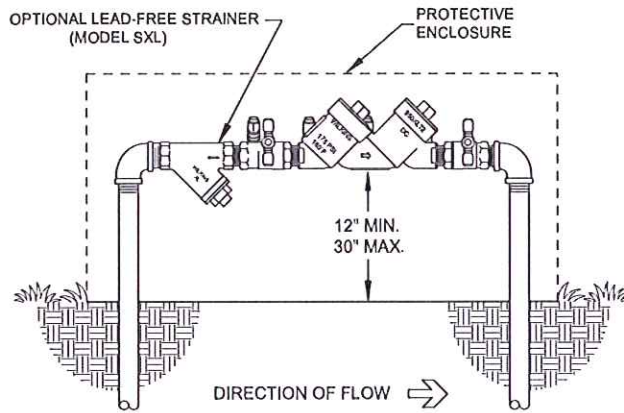
**MODEL 950XLT2 3/4", 1", 1 1/4", 1 1/2" & 2" (STANDARD & METRIC)**



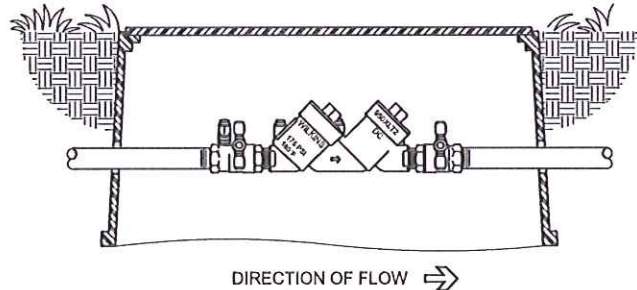
**Typical Installation**

Local codes shall govern installation requirements. To be installed in accordance with the manufacturer's 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. If installed below grade, be certain adequate drainage is provided to prevent the device from being submerged.

Capacity thru Schedule 40 Pipe				
Pipe size	5 ft/sec	7.5 ft/sec	10 ft/sec	15 ft/sec
1/8"	1	1	2	3
1/4"	2	2	3	5
3/8"	3	4	6	9
1/2"	5	7	9	14
3/4"	8	12	17	25
1"	13	20	27	40
1 1/4"	23	35	47	70
1 1/2"	32	48	63	95
2"	52	78	105	167



**OUTDOOR INSTALLATION**



**PIT INSTALLATION**

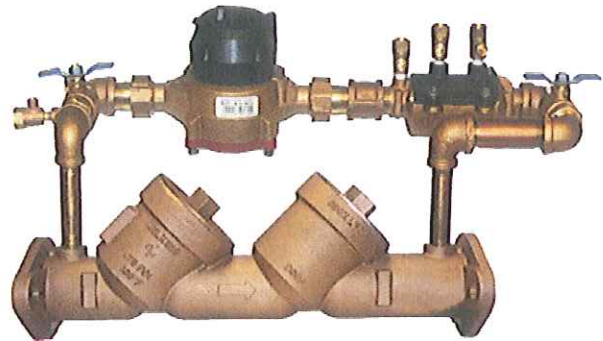
**Specifications**

The Double Check Type Backflow Preventer shall be certified to NSF/ANSI 372, shall be ASSE Listed 1015, rated to 180°F, and supplied with full port ball valves. The main body and access covers shall be low lead bronze (ASTM B 584), the seat ring and all internal polymers shall be NSF® Listed Noryl™ and the seat disc elastomers shall be SILICONE. The first and second check shall be located at a 45° angle and accessible for maintenance from the top of the device, without removing the device from the line. Each check shall have separate access covers and test cocks shall be accessible from the top of the device. Test cocks shall be protected from debris by a plug. The Double Check Type Backflow Preventer shall be a ZURN WILKINS Model 950XLT2.



### Application

Designed to take the place of existing 2" water meters (17" lay length standard) on water connections in fire sprinkler systems to protect against both backsiphonage and backpressure of polluted water into the potable water supply. Allows the system to be upgraded to having a backflow preventer in line and still have some minor metering capability with the by-pass. This becomes an ideal retrofit product since no re-piping is necessary, making it a significant cost savings method to add backflow protection. Change out will be performed by both utility and fire protection contractors. Model 950XLTDAF shall provide protection where a potential health hazard does not exist.



### Standards Compliance

- UL® Classified
- C-UL® Classified

### Materials

Main valve body	Cast Bronze ASTM B 584
Access covers	Cast Bronze ASTM B 584
Fasteners	Stainless Steel, 300 Series
Elastomers	Silicone (FDA approved)
	Buna Nitrile (FDA approved)
Polymers	Noryl™, NSF Listed
Springs	Stainless steel, 300 series
Test cock cover	Plastic

### Options

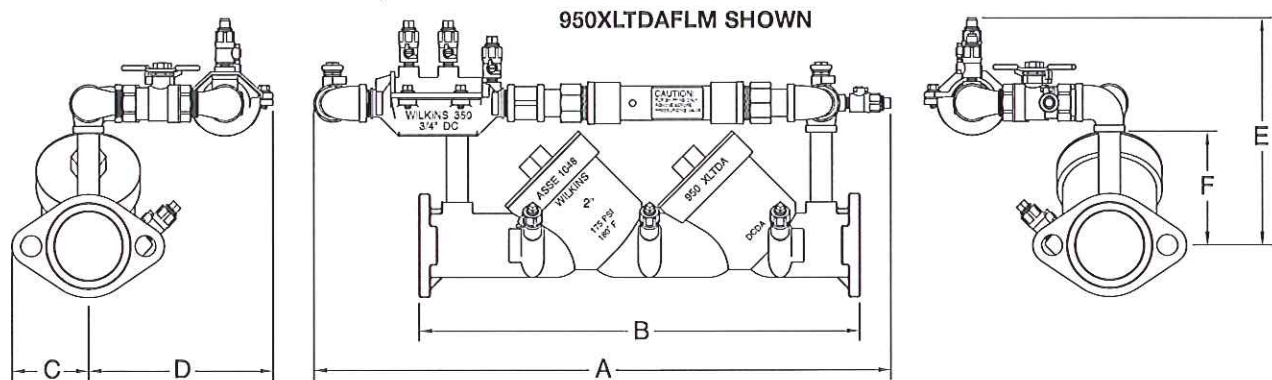
- ☐ LM - less water meter
- ☐ LM - with gal meter (standard)
- ☐ CFM - with cu ft meter
- ☐ 950XLTF - less by-pass (no approvals)

### Accessories

- ☐ Repair kit (rubber only)
- ☐ Test Cock Lock (Model TCL24)
- ☐ QT-SET Quick Test Fitting Set

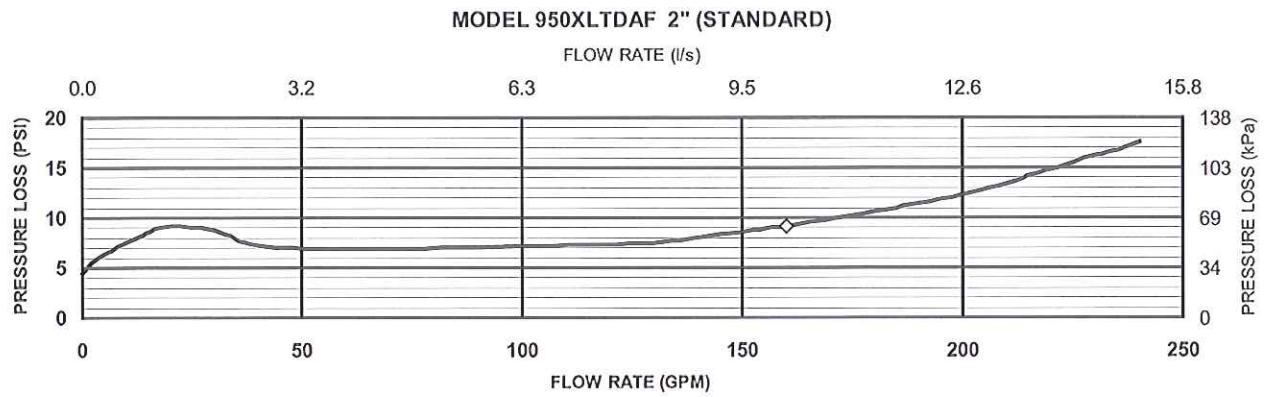
### Features

Sizes:	2"
Maximum working water pressure	175 PSI
Maximum working water temperature	180°F
Hydrostatic test pressure	350 PSI
End connections - Flanged	2" Oval

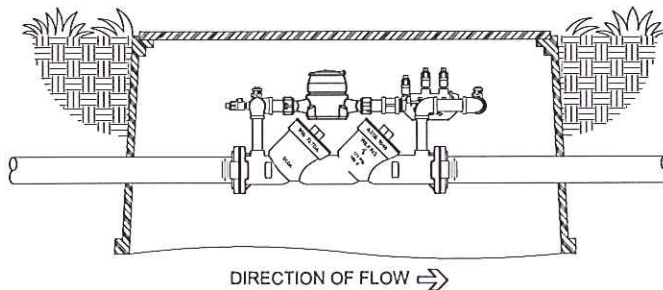
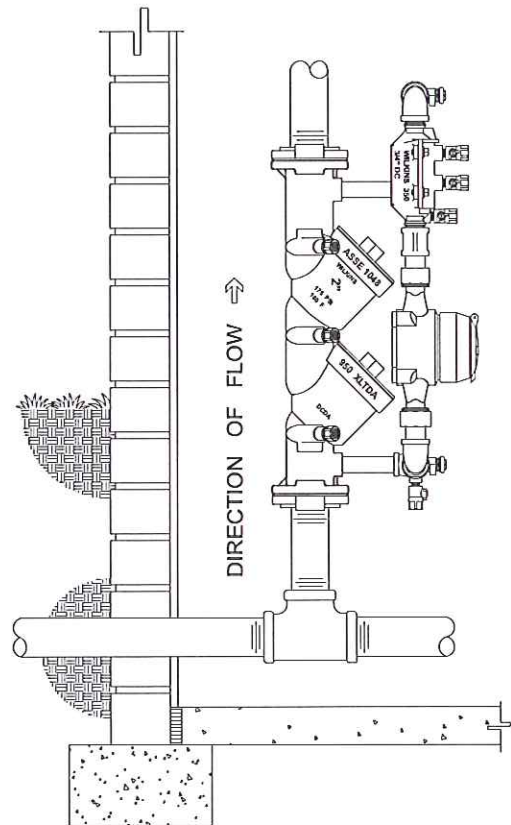


### Dimensions & Weights (do not include pkg.)

MODEL SIZE		DIMENSIONS (approximate)												WEIGHT	
		A		B		C		D		E		F		lbs.	kg
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
2	50	24	610	17	432	3	76	7 1/2	191	8 7/8	225	4 3/8	111	36	16.3

**Important:**

Inquire with governing authorities for local installation requirements. To be installed in accordance with the manufacturer's instructions. Always consult local codes for installation methods, approvals, and guidance.

**PIT INSTALLATION****VERTICAL INSTALLATION****Specifications**

The Double Check Detector Backflow Prevention Assembly shall be supplied with oval meter flanges. The main body and access covers shall be bronze (ASTM B 584), the seat ring and all internal polymers shall be NSF® Listed Noryl™ and the seat disc elastomers shall be SILICONE. The first and second check shall be located at a 45° angle and accessible for maintenance from the top of the device, without removing the device from the line. Each check shall have separate access covers and test cocks shall be accessible from the top of the device. Test cocks shall be protected from debris by a tethered cap. The Double Check Detector Backflow Prevention Assembly shall be a ZURN WILKINS Model 950XLTD AF.