

ZURN 450DA Double Check Detector Instruction Manual

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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. Assembly shall provide protection where a potential health hazard does not exist.

Standards Compliance

(Unless otherwise noted, applies to sizes 4" thru 10")

- ASSE® Listed 1048
- CSA® Certified B64.5 (4" & 6")
- AWWA Compliant C 510, and C550
- UL® Classified
- · C-UL® Classified
- FM® Approved
- NYC MEA 26-00-M VOL 3
- 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*
- (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
Fasteners Stainless Steel, 300 Series
Elastomers EPDM (FDA approved)
Buna Nitrile (FDA approved)
Polymers NORYL™
Springs Stainless Steel, 300 series

Features

Sizes: 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): AWWA C606

(Flanged): ANSI B16.42

Class 150

Options

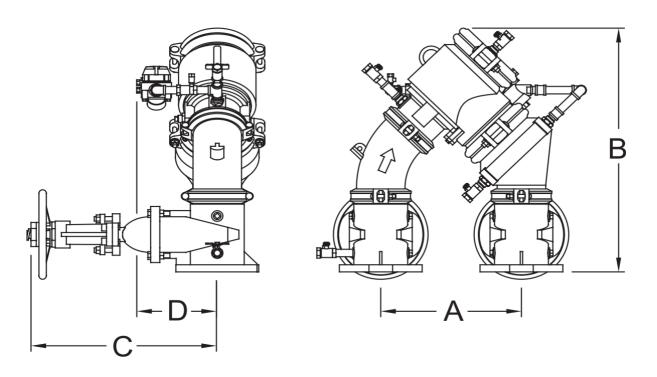
(Suffixes can be combined)

- with OS & Y gate valves (standard)
- L less shut-off valves (grooved body connections)
- LM less water meter
- with gpm meter (standard)
- CFM with cu ft/min meter
- G with groove end gate valves
- FG with flanged inlet gate connection and grooved outlet gate connection
- FSC with epoxy coated wye type strainer (flanged only)
- BG with grooved end butterfly valves with integral supervisory switches
- BF with flanged end butterfly valves with integral
- · supervisory switches
- PI with Post Indicator Gate Valve

Accessories

- Repair kit (rubber only)
- Thermal expansion tank (Model XT)
- Valve setter (Model FLS or MJS or MJFS)
- Gate valve tamper switch (OSY-40)
- QT-SET Quick Test Fitting Set

Dimensions & Weights (do not include pkg.)



MODEL 450DA		WEIGHT									
SIZE	_ 430DA	LESS S F VALV	HUTOF ES	OS&Y G/	ATE (G	OS&Y GA	TE (GX	WITH E	BFLY (G	WITH BI XG) lbs. 153 248	FLY (G
in.	mm	lbs.	kg	lbs.	kg	lbs. kg		lbs.	kg	lbs.	kg
4	100	105	48	295	134	271	123	175	79	153	69
6	150	174	79	474	215	452	205	278	126	248	112
8	200	402	182	878	398	824	374	592	269	546	248
10	250	420	191	1076	488	1018	462	694	315	636	288

MODEL	DIMENSIONS (approximate)																
450DA SIZE		Α		B WITH G ATEVALVE S		B WITH BF LYVALVES		B LESS G ATEVALV ES		C OS&Y OPEN		C OS&YC LOSED		C WITH BFLYVAL VES		D	
in.	mm	in.	mm	in.	mm	in.	m m	in.	m m	in.	m m	in.	m m	in.	m m	in.	m m
4	100	18 5/ 16	465	30	762	27 3/ 4	70 5	21	53 3	22 3 /4	57 8	18 1 /4	46 0	9	22 9	8	20 3
6	150	18 11 /16	475	35 1 /2	902	32 1/ 8	81 6	25	63 5	30 1 /8	76 5	23 3 /4	60 3	10 1 /4	26 0	10	25 4
8	200	29	737	46	116 8	42 9/ 16	10 81	34 7/ 16	84 5	37 3 /4	95 9	29 1 /4	74 3	12	30 5	13	33 0
10	250	29	737	47 1 /2	120 7	47 1/ 2	12 07	34 7/ 16	84 5	45 3 /4	11 62	35 3 /8	89 9	13	33 0	13	33 0

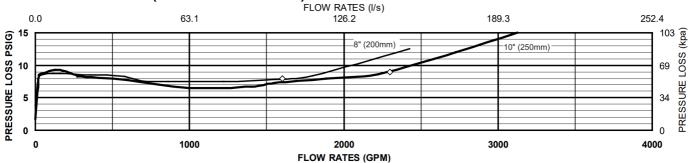
In Canada | Zurn Industries Limited 7900 Gateway Drive, Unit 10, Brampton, Ontario L6T 5W6, 877-892-5216 www.zurn.com

Rev. J **Date:** 12/22

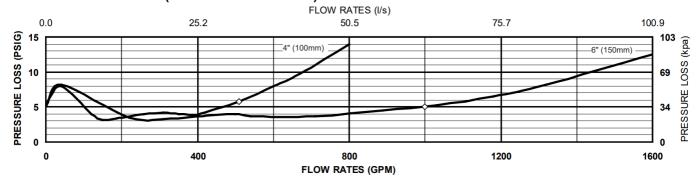
Document No. BF-450DA Product No. Model 450DA Patent zurn.com/patents

Flow Characteristics

MODEL 450DA 4" & 6" (STANDARD & METRIC)



MODEL 450DA 8" & 10" (STANDARD & METRIC)



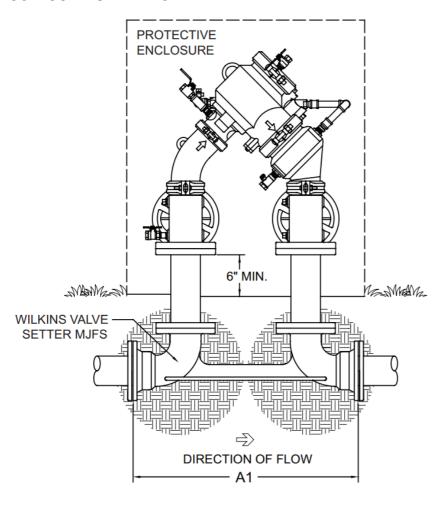
Typical Installation

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 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 So	chedule 40 Pipe (GPI	M)				
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		

OUTDOOR INSTALLATION



MODEL SIZE			DIMENSIONS (approximate)						
WODEL SIZ	L		A1 SETTER END	TO END FLS	A1 SETTER END TO END MJS				
in.	mm	ım		mm	in.	mm			
4	100 31		5/16	795	29.313	745			
6	150		34 3/4	884	32.75	832			
8	200		47	1194	44.625	1133			
10	250		51	1295	47	1194			

Specifications

The Double Check Detector Backflow Preventer shall be certified to NSF/ANSI/CAN 61, ASSE® Listed 1048 and supplied with full port OS & Y 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™, 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 Detector Backflow Preventer shall be a ZURN WILKINS Model 450DA.

Zurn Industries, LLC | Wilkins

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Documents / Resources



ZURN 450DA Double Check Detector [pdf] Instruction Manual 450DA Double Check Detector, 450DA, Double Check Detector, Check Detector, Detector

References

• Engineered Water Solutions | Zurn

Manuals+,