

Application

The Zurn Wilkins Model ZW218 Slow Close Check Valve will fully open when inlet pressure is greater than outlet pressure allowing flow. The check valve will close drip tight via the control connected from the outlet to the cover when outlet pressure is greater than the inlet pressure. Opening and closing speed control valves are included with the check valve to prevent surges in the line when the check valve opens and closes. In addition the Model ZW218 comes standard with epoxy coating internally and externally for corrosion protection, as well as isolation valves for quick and easy maintenance or repair.



Standards Compliance:

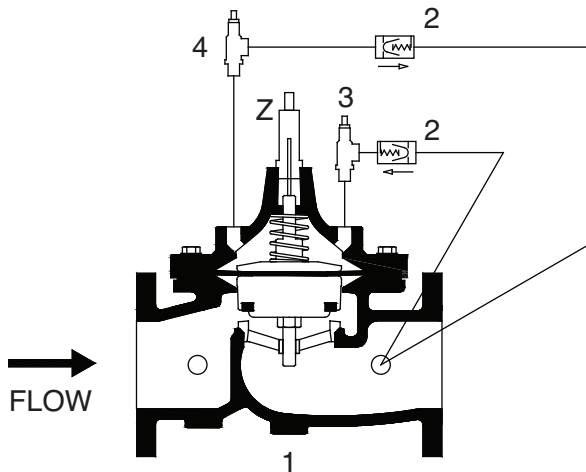
- Lead Plumbing Law Certified by IAPMO R&T**
**(0.25% MAX. WEIGHTED AVERAGE LEAD CONTENT)
- ANSI/AWWA C530

Materials

Main Valve Body	Ductile Iron ASTM A536
Main Valve Bonnet	Ductile Iron ASTM A536
Disc Guide	Bronze ASTM B 176
Seat	Bronze ASTM B 176
Disc	Buna-N Rubber
Diaphragm	Nylon Reinforced Buna-N
Stem	Stainless Steel
Spring	Stainless Steel

Schematic Diagram

Item	Description of Standard Features
1	Main Valve
2	Check Valve
3	Closing Speed Control
4	Opening Speed Control



Sizes

GLOBE STYLE BODY:

- | | |
|---------------|---|
| Threaded ends | <input type="checkbox"/> 1 1/4" - 3" 400 psi max. |
| Flanged ends | <input type="checkbox"/> 1 1/2" - 10" |
| | <input type="checkbox"/> ANSI Class 150, 250 psi max. |
| | <input type="checkbox"/> ANSI Class 300, 400 psi max. |
| Grooved ends | <input type="checkbox"/> 1 1/2" - 10" 300 psi max. |

TEMPERATURE RATING: Water 33°F to 140°F

Standard Features

- Epoxy Coated, FDA Approved
- Pilot Assembly
 - Closing Speed Control
 - Opening Speed Control
- ANSI Class 150 Flanges

Options

(Add suffix letters to ZW218)

Connections

- G - IPS Grooved
- TH - NPT Threaded
- Y - ANSI Class 300 Flanges

Main Valve Options

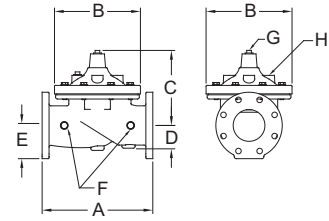
- SS - Stainless steel seat/retainer/cover guide
- Z - ZPI Visual Position Indicator

Pilot System

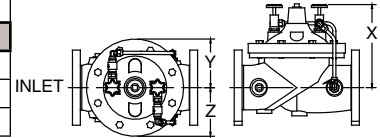
- ST - Stainless Steel Tubing and Fittings

Main Valve Dimensions

DIM		VALVE SIZE inches (mm)								
		1 1/4 (32)	1 1/2 (38)	2 (50)	2 1/2 (65)	3 (80)	4 (100)	6 (150)	8 (200)	10 (250)
A	Threaded	7 1/4	7 1/4	9 7/16	11	12 1/2	n/a	n/a	n/a	n/a
	Class 150 Flange	n/a	8 1/2	9 3/8	11	12	15	20	25 3/8	29 3/4
	Class 300 Flange	n/a	9	10	11 5/8	13 1/4	15 5/8	21	26 7/16	31 1/8
	Grooved	n/a	8 1/2	9	11	12 1/2	15	20	25 3/8	29 3/4
B	Diameter	5 5/8	5 5/8	6 3/4	8 1/16	9 3/16	11 11/16	15 3/4	20 1/8	23 11/16
C	Max.	5 3/4	5 3/4	6 3/16	7 3/8	8 1/8	10 3/16	12 5/16	15 9/16	17 5/8
D	Max.	1 3/8	1 3/8	1 3/4	2 1/8	2 9/16	3 7/16	4 15/16	5	5 13/16
E	Class 150 Flange	n/a	2 1/2	3	3 1/2	3 3/4	4 1/2	5 1/2	6 3/4	8
	Class 300 Flange	n/a	3 1/16	3 1/4	3 3/4	4 1/8	5	6 1/4	7 1/2	8 3/4
F	NPT Body Tap	3/8	7/16	3/8	1/2	1/2	3/4	3/4	1	1
G	NPT Cvr. Plug Tap	1/2	1/2	1/2	1/2	1/2	3/4	3/4	1	1
H	NPT Cover Tap	3/8	7/16	3/8	1/2	1/2	3/4	3/4	1	1
Valve Stem Internal Thread UNF		10-32	10-32	10-32	10-32	1/4-20	1/4-20	1/4-20	3/8-16	3/8-16
Stem Travel (inches)		7/16	7/16	3/4	7/8	15/16	1 3/16	1 3/4	2 3/8	2 13/16
Approx. Wt. Lbs.		23	25	35	50	70	140	285	500	700
Pilot System Dimensions										
X	Max. (inches)	6 3/8	6 3/8	6 3/4	7 3/8	8 1/8	10	12 1/4	15 5/8	17 5/8
Y	Max. (inches)	4 1/4	4 1/4	4 1/2	4 13/16	4 3/4	5 7/8	7 7/8	10	11 7/8
X	Max. (inches)	4 1/4	4 1/4	4 1/2	4 13/16	4 3/4	5 7/8	7 7/8	10	11 7/8



PILOT SYSTEM DIMENSIONS

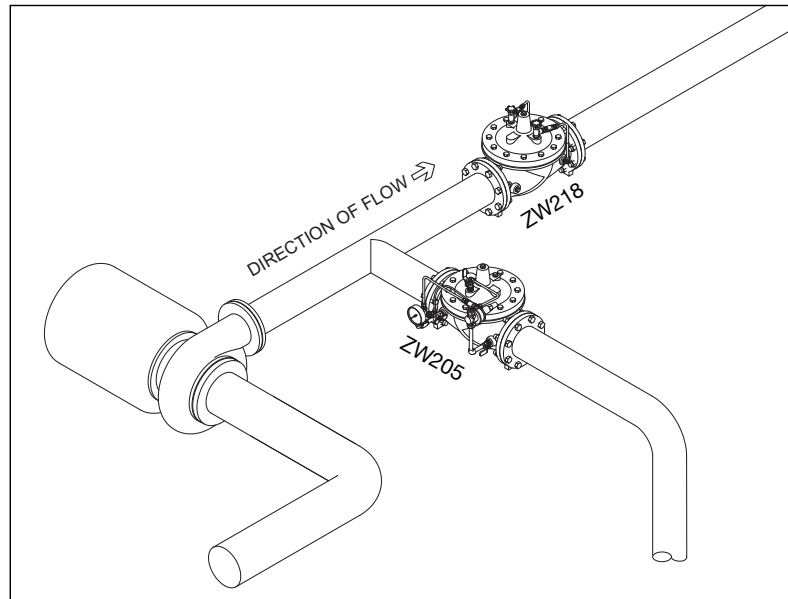


Flow Characteristics

Note: The flow rate through the slow close check valve affects the performance of the valve. Maximum flow rates based on pipeline velocities of 6 feet per second are recommended. If velocities are higher than 6 feet per second, consideration should be given to adding a Zurn Wilkins ZW205 downstream of the ZW218 discharging to a drain or recirculating to the pump supply to protect the pump from sudden down stream surges.

Valve Size	inches	1 1/4	1 1/2	2	2 1/2	3	4	6	8	10
	mm	32	40	50	65	80	100	150	200	250
Suggested Flow (GPM)	Max. Continuous	30	40	65	90	140	240	550	950	1475
	Max. Continuous	1.9	2.5	4.1	5.7	8.8	15	35	60	93

Typical Installation



Specifications

The Slow Close Check Valve shall be a diaphragm actuated valve supplied with opening and closing speed controls. The main valve body shall be ductile iron ASTM A 536. The stem of the basic valve shall be guided top and bottom. The diaphragm shall not be used as a seating surface. All internal and external ferrous surfaces shall be coated with a high quality, fusion epoxy coating. The Slow Close Check Valve shall be a ZURN WILKINS Model ZW218.

Job Name _____ Contractor _____

Job Location _____ Engineer _____