

# **Model 500XL**

# **Water Pressure Reducing Valve** with Integral By-pass Check Valve

#### **Application**

Zurn Wilkins model 500XL designed for installation on potable water lines to reduce high inlet pressure to a lower outlet pressure. The high flow capacity makes this device most suitable for industrial water lines and commercial water systems. The direct acting integral by-pass design prevents buildup of excessive system pressure caused by thermal expansion. The balanced piston design enables the regulator to react in a smooth and responsive manner to changes in system flow demand, while at the same time, providing protection from inlet pressure changes.

## **Standards Compliance**

- ASSE® Listed 1003 (1/2" thru 2 1/2")
- · IAPMO® Listed (1/2" thru 2")
- · CSA® Certified (1/2" thru 2")
- City of Los Angeles Approved (1/2" thru 2")
- · Meets the requirements of NSF/ANSI/CAN 61

#### **Materials**

Main valve body Low Lead Cast bronze ASTM B 584 Access covers Low Lead Cast bronze ASTM B 584

Low Lead Brass

Stainless steel, 300 series **Fasteners** 

Stem & plunger Low Lead Cast bronze ASTM B 584

Low Lead Brass

Buna Nitrile (FDA approved) Elastomers

EPDM (FDA approved)

Cap gaskets Natural vulcanized fibre

Acetal (Delrin<sup>™</sup> 500)

Oil tempered wire, ASTM A 229 **Springs** Seat Stainless steel, 300 series

## **Features**

Sizes: 1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2", 3" Maximum working water pressure 300 psi Maximum working water temperature 140° F Reduced pressure range 25 psi to 75 psi

Factory preset (field set 2 1/2" & 3") 50 psi

Threaded connections (FNPT) ANSI B1.20.1 Copper connections (FC) ANSI B 16.22 CPVC tailpiece: Max.hot water temp. 140°F @ 100 psi

Cold water rated temp. 73.4°F @ 400 psi





# **Options**

(Suffixes can be combined)

- standard with single union FNPT inlet x FNPT outlet (1/2" thru 2") and less union (21/2" & 3")
- $\Box$  C copper sweat connection (1/2" thru 2") copper sweat strainer 3/4" & 1" only

All other strainers are FNPT

75 psi to 125 psi spring range, factory set at □ HR

85 psi (field set 2 1/2" & 3")

☐ HLR 10 psi to 125 psi spring range, factory set at 50 psi

☐ HTSTSC -180°F maximum temp, stainless steel trim,

spring, sealed cage

less integral by-pass check valve (3/4"-2") □ LPV 180°F maximum temp with 10 psi to 35 psi

spring range, factory set at 20 psi

□ SC sealed cage bell housing and stainless steel

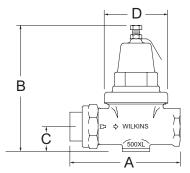
adjustment screw

- □ SW made for salt water service
- with lead-free bronze "Y" strainer on inlet ☐ YSBR 400 psi inlet rating and 75 psi to 125 psi □ 510XL

spring range, factory set at 85 psi (field set 2 1/2" & 3")

- □ P tapped and plugged for gauge tapped and plugged with gauge  $\Box$  G ☐ CPVC CPVC tailpiece connection (3/4"-1")
- **Accessories**

Repair kit (rubber only)



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

SIZE		CONNECTIONS	DIMENSIONS (approximate)								WEIGHT	
			Α		В		С		D		WEIGHT	
in.	mm		in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg.
1/2	15	SINGLE UNION	4 1/2	108	6	152	1 5/8	41	2 3/4	70	3	1.5
3/4	20	SINGLE UNION	4 5/8	118	6	152	1 1/8	29	2 3/4	70	4	2.0
1	25	SINGLE UNION	5 1/8	130	6 7/8	175	1 5/8	41	3 5/16	84	6	3.0
1 1/4	32	SINGLE UNION	6 5/16	160	7 1/4	184	1 3/4	45	4	102	7	3.0
1 1/2	40	SINGLE UNION	8 5/16	211	10	254	1 7/8	48	5	127	14	6.5
2	50	SINGLE UNION	9 1/2	241	10 3/4	273	2 1/8	54	6 1/2	165	20	9.0
2 1/2	65	LESS UNION	10	254	14 1/2	368	3	76	8	203	28	12.5
3	80	LESS UNION	11 1/8	283	16	406	3 1/2	89	8	203	44	20.0

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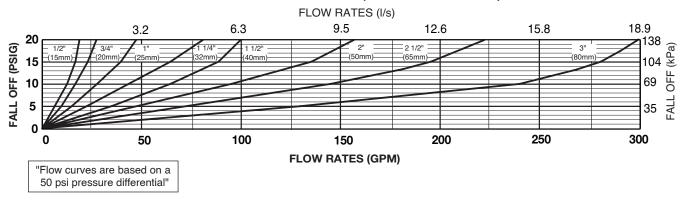
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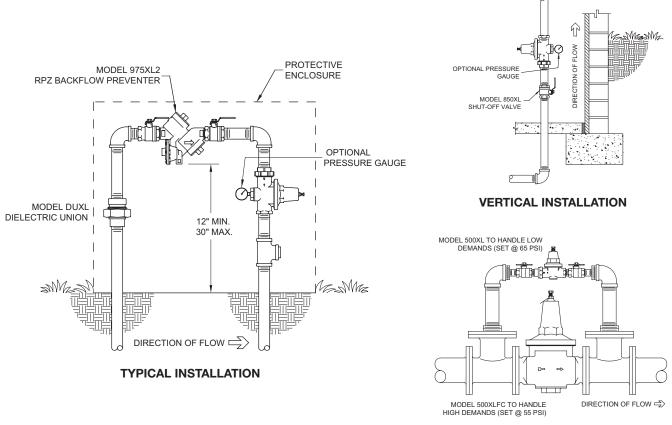
#### MODEL 500XL 1/2" THRU 3" (STANDARD & METRIC)



#### **Typical Installation**

Local codes shall govern installation requirements. Unless otherwise specified, the assembly shall be mounted in accordance with the manufacturers' instructions and the latest edition of the Uniform Plumbing Code. The assembly shall be installed with sufficient side clearance for testing and maintenance. The Model 500XL may be installed in any position. If installed in a pit, vault, or inside application, specify the "SC" sealed cage option. Multiple installations are recommend for wide demand variations or where the desired pressure reduction is more than 4 to 1 (i.e.: 200 psi inlet reduced to 50 psi outlet).

**Caution:** Anytime a reducing valve is adjusted, a pressure gauge must be used downstream to verify correct pressure setting. Do not bottom adjustment bolt on bell housing.



#### **BATTERY INSTALLATION**

## **Specifications**

The Pressure Reducing Valve shall be certified to NSF/ANSI/CAN 61, consisting of a low lead bronze body and bronze bell housing, a separate access cover for the plunger and a bolt to adjust the downstream pressure. The bronze bell housing and access cap shall be threaded to the body and shall not require the use of ferrous screws. The assembly shall be of the balanced piston design and shall reduce pressure in both flow and no-flow conditions. The assembly shall be accessible for maintenance without having to remove the body from the line. The Pressure Reducing Valve shall be a ZURN WILKINS Model 500XL.