



# Model 500XLYSBR

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

### Application

Zurn Wilkins model 500XLYSBR is 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

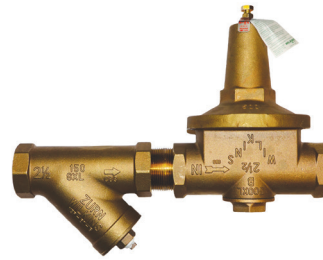
Main valve body	Low lead cast bronze ASTM B 584
Access covers	Low lead cast bronze ASTM B 584
	Low lead brass
Fasteners	Stainless steel, 300 series
Stem & plunger	Low lead cast bronze ASTM B 584
	Low lead brass
Elastomers	Buna Nitrile (FDA approved)
	EPDM (FDA approved)
Cap gaskets	Natural vulcanized fibre
	Acetal (Delrin™ 500)
Springs	Oil tempered wire, ASTM A 229
Strainer screen	Stainless steel, 300 series
	(20 mesh standard)
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	50 psi
Threaded connections (FNPT)	ANSI B1.20.1
Copper connections (FC)	ANSI B16.22

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

SIZE		CONNECTIONS	DIMENSIONS (approximate)										WEIGHT	
in.	mm		A		B		C		D		E		lbs.	kg.
1/2	15	SINGLE UNION	4 1/2	108	6	152	3	76	2 3/4	70	8 1/4	210	5	2.3
3/4	20	SINGLE UNION	4 5/8	118	6	152	3 1/2	89	2 3/4	70	9 1/8	232	6	2.7
1	25	SINGLE UNION	5 1/8	130	6 7/8	175	4	102	3 5/16	84	10	254	7	3.2
1 1/4	32	SINGLE UNION	6 5/16	160	7 1/4	184	4 3/4	121	4	102	13 1/8	333	9	4.1
1 1/2	40	SINGLE UNION	8 5/16	211	10	254	5	127	5	127	17 5/8	448	16	7.3
2	50	SINGLE UNION	9 1/2	241	10 3/4	273	6	152	6 1/2	165	18 5/8	473	24	10.9
2 1/2	65	LESS UNION	10	254	14 1/2	368	7 1/2	191	8	203	19 3/8	492	43	19.5
3	80	LESS UNION	11 1/8	283	16	406	8 1/2	216	8	203	25	635	60	27.2



LEAD FREE



NSF/ANSI/CAN 61

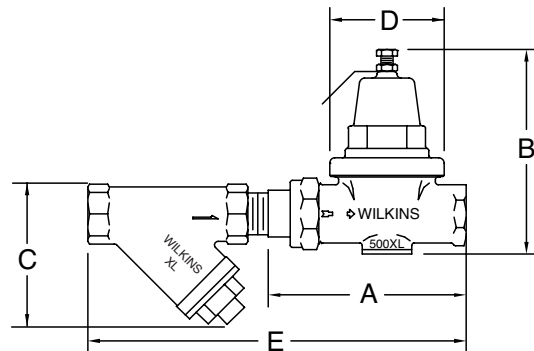
### Options

(Suffixes can be combined)

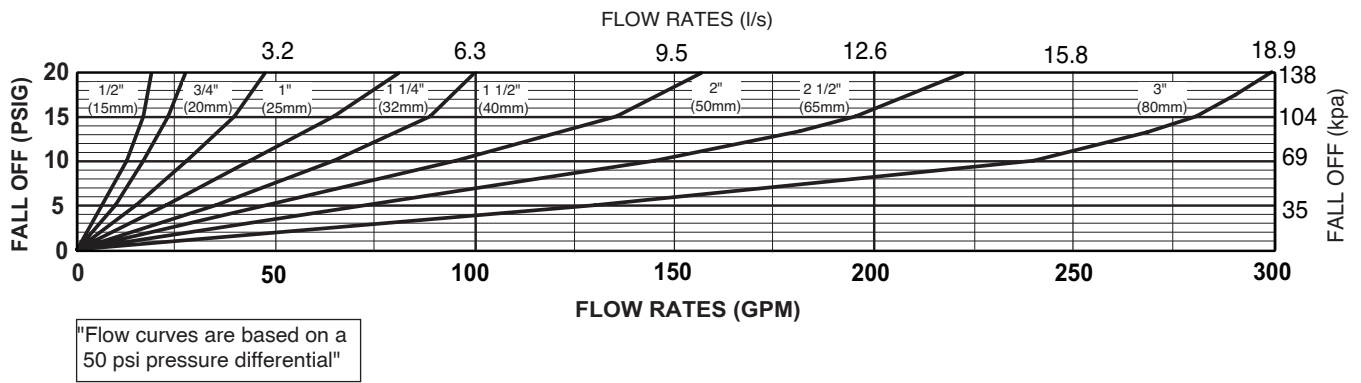
- standard with single union FNPT inlet x FNPT outlet (1/2" thru 2") and less union (2 1/2" & 3") Includes in-line lead-free bronze "Y" type strainer with 20 mesh stainless steel screen
- C - copper sweat strainer 3/4" & 1" only All other strainers are FNPT
- HR - 75 psi to 125 psi spring range, factory set at 85 psi
- HLR - 10 psi to 125 psi spring range, factory set at 50 psi
- HT - 180°F maximum temp
- 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
- 510XL - 400 psi inlet rating and 75 psi to 125 psi spring range, factory set at 85 psi
- P - tapped and plugged for gauge
- G - tapped and plugged with gauge

### Accessories

- Repair kit (rubber only)

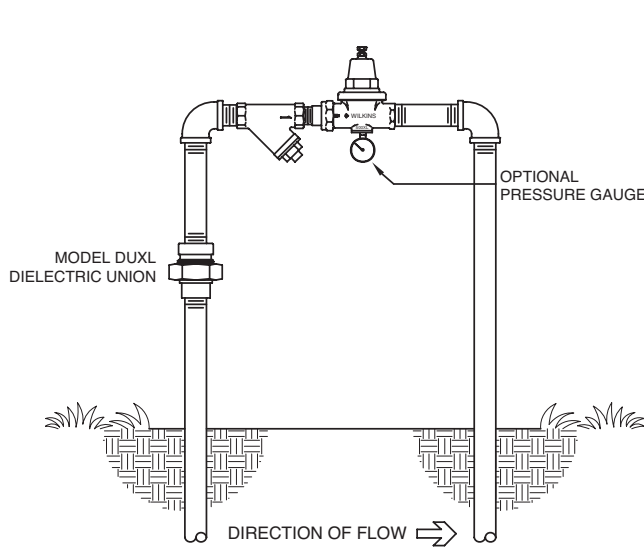


**MODEL 500XLYSBR 1/2" THRU 3" (STANDARD & METRIC)**

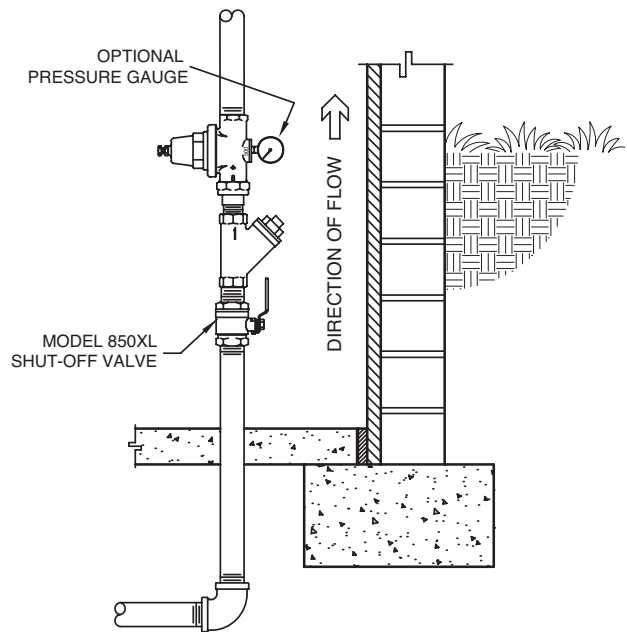


**Typical Installation**

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 500XLYSBR 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 (ie: 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.



**HORIZONTAL INSTALLATION**



**VERTICAL 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 500XLYSBR.