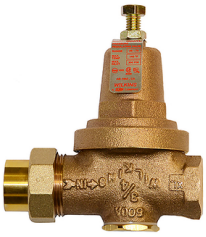
WILKINS Model 500XL

High Capacity Commercial Grade Water Pressure Reducing Valve

TAG

Application

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.



3/4" 500XL

Standards Compliance

- ASSE® Listed 1003 (1/2" thru 2 1/2")
- cUPC® Listed (1/2" thru 2")
- CSA® Certified B356 (1/2" thru 2")
- City of Los Angeles Approved (1/2" thru 2")
- Meets the requirements of NSF/ANSI/CAN 61 and 372*

*(LESS THAN 0.25% WEIGHTED AVERAGE LEAD CONTENT)

Materials

Main Valve Body	Low Lead Cast Bronze ASTM B584
Access Covers	Low Lead Brass
	Low Lead Cast Bronze ASTM B584
Cap Gaskets	Acetal (Delrin®)
	Natural Vulcanized Fibre
Elastomers	Buna Nitrile (FDA approved)
	EPDM (FDA approved)
Fasteners	300 series Stainless Steel
Seats	300 series Stainless Steel
Springs	Oil tempered wire ASTM A 229
Stem and Plunger	Low Lead Brass
	Low Lead Cast Bronze ASTM B584

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)

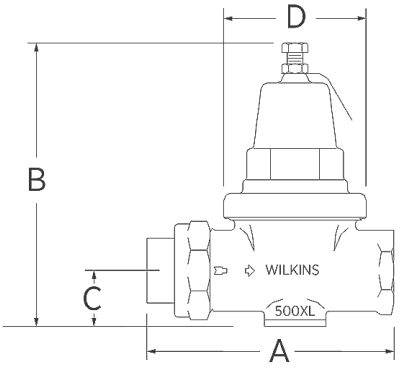
	Standard with single union FNPT inlet x FNPT outlet (1/2" thru 2") and less union (2-1/2" & 3")
510XL	400 psi inlet rating and 75 psi to 125 psi spring range, factory set at 85 psi (field set 2-1/2" & 3")
L	Less integral by-pass check valve (3/4"-2")
HR	75 psi to 125 psi spring range, factory set at 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
LPV	180°F maximum temp 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
C	Copper sweat connection (1/2" thru 2")
CPVC	CPVC tailpiece connection (3/4"-1")
YSBR	Lead-free bronze wye strainer on inlet, if C option is selected only available in 3/4" and 1"
P	Tapped and plugged for gauge
G	Tapped and plugged with gauge

Accessories

- Repair Kits (1/2" – 1")
- Repair Kits (1-1/4" – 3")

Dimensions & Weights (do not include pkg.)

SIZE		CONNECTIONS	DIMENSIONS (approximate)								WEIGHT	
			A		B		C		D			
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	9 7/8	251	14 1/2	368	3	76	8	203	28	12.5
3	80	LESS UNION	10 15/16	278	16	406	3 1/2	89	8	203	44	20.0

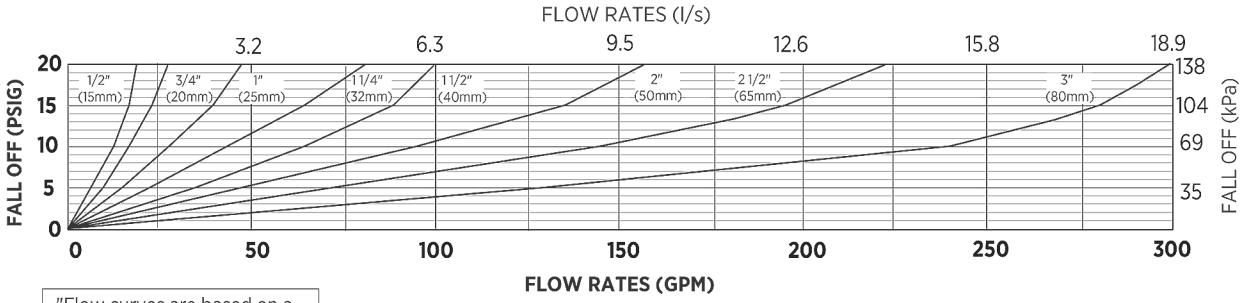


Design and dimensional data (inches and [mm]) are subject to manufacturing tolerances and change without notice.

Flow Characteristics

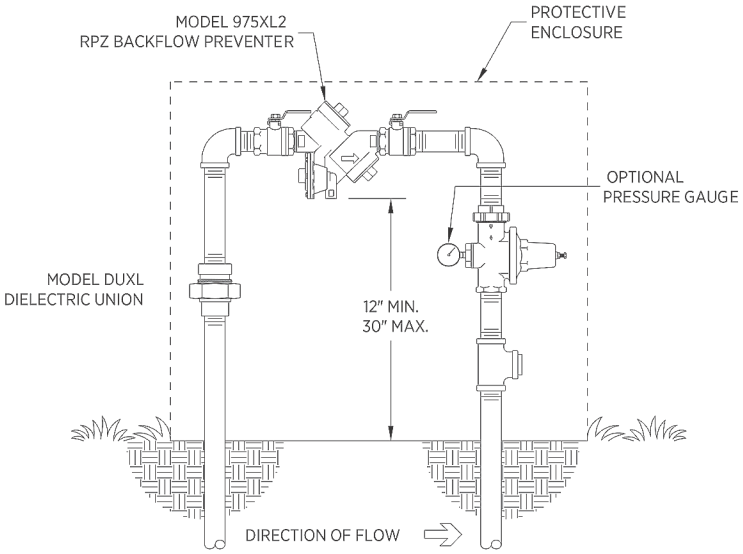
◇ Rated Flow (established by approval agencies)

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

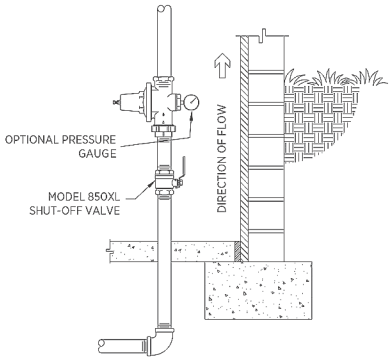


"Flow curves are based on a 50 psi pressure differential"

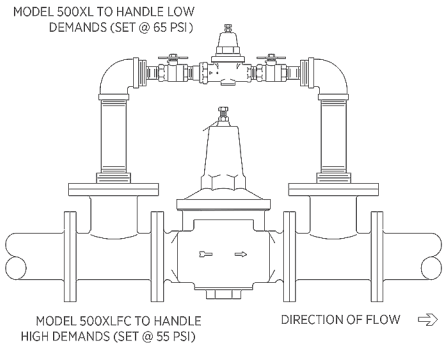
Typical Installation



TYPICAL INSTALLATION



VERTICAL INSTALLATION



BATTERY INSTALLATION

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 recommended for wide demand variations or where the desired pressure reduction is more than 3 to 1 (i.e.: 150 psi inlet reduced to 50 psi outlet).
Caution: Anytime a reducing valve is adjusted, a pressure gauge must be used downstream to verify the correct pressure setting. Do not bottom adjustment bolt on bell housing.

Installation and Maintenance Instructions - Model 500XL

Specifications

The Pressure Reducing Valve shall be certified to NSF/ANSI/CAN 61 and 372, 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 WILKINS Model 500XL.