Model 500XLYSBR
Water Pressure Reducing Valve
with Integral By-pass Check Valve

Application
Ideal for use where Lead-Free* valves are required. 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 irrigation systems. The direct acting integral bypass 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”)
• NSF® Listed - Standard 61 & 372*
• Certified to NSF/ANSI 372* by IAPMO R&T
*(0.25% MAX. WEIGHTED AVERAGE LEAD CONTENT)

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
Low lead brass
Elastomers Buna Nitrile (FDA approved)
EPDM (FDA approved)
Cap gaskets Natural vulcanized fibre
Acetal (Delrin™ 500), NSF Listed
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

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
- 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
- LPC - 140°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
- S10 - 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)

Dimensions & Weights (do not include pkg.)

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<th>SIZE</th>
<th>CONNECTIONS</th>
<th>DIMENSIONS (approximate)</th>
<th>WEIGHT</th>
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Product No. Model 500XLYSBR
**Flow Characteristics**

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

![Flow Rate vs. Pressure Curves](image)

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

**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 recommended 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.

**Specifications**
The Pressure Reducing Valve shall be certified to NSF/ANSI 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 ZURN WILKINS Model 500XLYSBR.