



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

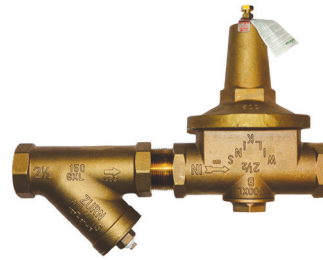
| | |
|-----------------|---------------------------------|
| Main valve body | Low lead cast bronze ASTM B 584 |
| Access covers | Low lead cast bronze ASTM B 584 |
| | Low lead brass |
| Fasteners | Stainless steel, 300 series |
| Stem & plunger | Low lead cast bronze ASTM B 584 |
| | Low lead brass |
| 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

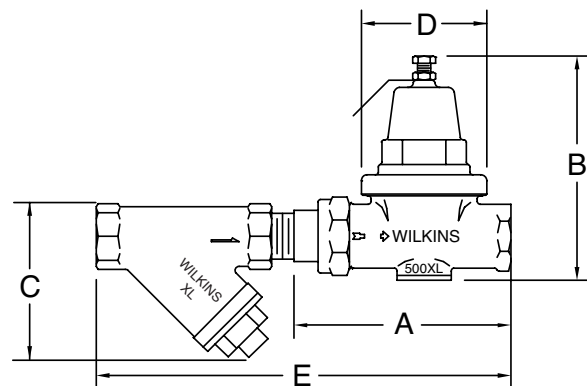
Options

(Suffixes can be combined)

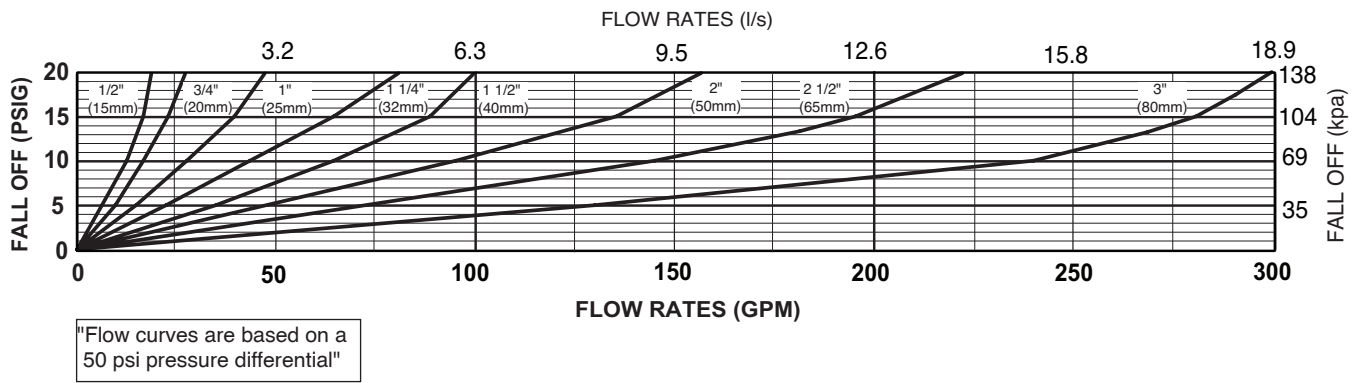
- standard with single union FNPT inlet x FNPT outlet (1/2" thru 2") and less union (2 1/2" & 3") Includes in-line lead-free bronze "Y" type strainer with 20 mesh stainless steel screen All other strainers are FNPT
- HR - 75 psi to 125 psi spring range, factory set at 85 psi
- HLR - 10 psi to 125 psi 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)

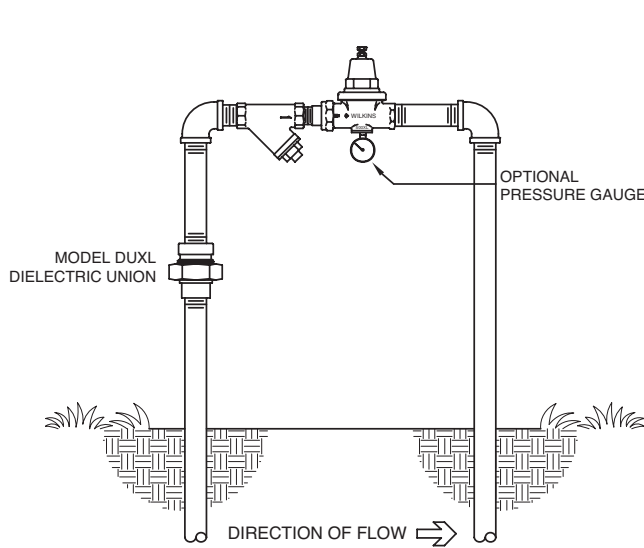


MODEL 500XLYSBR 1/2" THRU 3" (STANDARD & METRIC)

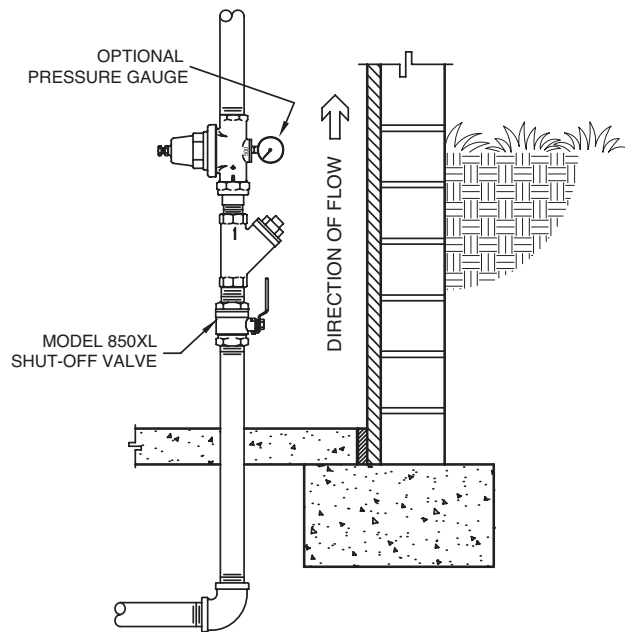


Typical Installation

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.