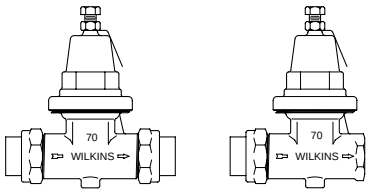
WILKINS
A ZURN COMPANY

# Model 70

Water Pressure Reducing Valve




## FEATURES

Sizes: ❑ ½" ❑ ¾" ❑ 1"

| | |
|---|---|
| Maximum working water pressure | 300 psi |
| Maximum working water temperature | 180°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)

- ❑ - with single union FNPT connection (standard)
- ❑ C - with FC (copper sweat) union connection
- ❑ CH - chrome plated cartridge (3/4" & 1")
- ❑ DM - double male meter thread connection, 1" National Hose Thread fits 5/8" x 3/4" and 3/4" water meters (less union; #34-70DM)
- ❑ DU - with double union FNPT connection
- ❑ DUCM - with double union male copper sweat (3/4" - 1")
- ❑ LP - reduced pressure range 10 to 30 psi; factory set at 15 psi
- ❑ LU - less union assembly, female x female NPT
- ❑ P - tapped & plugged for gauge
- ❑ SC - sealed cage bell housing and stainless steel adjusting screw
- ❑ SS - sealed cage bell housing with stainless steel adjusting screw and spring

## ACCESSORIES

- ❑ Repair kit
- ❑ Water thermal expansion tank (Model WXTP)
- ❑ Special in-line spacer nipple (34-70DUSPC & 1-70DUSPC only)
- ❑ In-line strainer screen for DUSPC ( SCR)
- ❑ Water hammer arrester (Model 1250)
- ❑ Tailpiece kit (TPK)

## APPLICATION

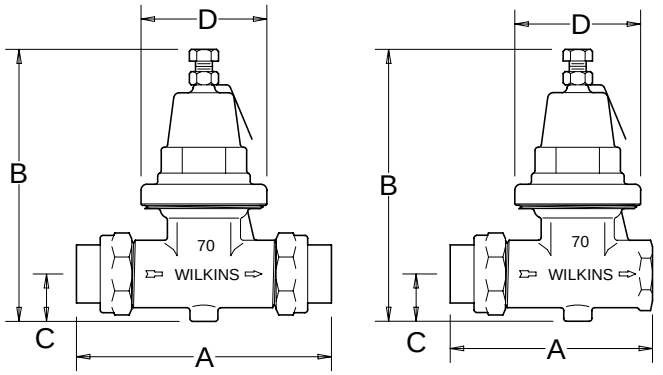
Designed for installation on potable water lines to reduce high inlet pressure to a lower outlet pressure. The unitized replaceable cartridge reduces time involved with cleaning and maintenance. The direct acting integral by-pass design prevents buildup of excessive system pressure caused by thermal 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
- ❑ IAPMO® Listed
- ❑ CSA® Certified
- ❑ City of Los Angeles Approved

## MATERIALS

| | |
|---|---|
| Body and bell | Cast bronze, ASTM B 584 |
| Seat | Stainless Steel, 300 series |
| Stem & sleeve | Brass ASTM B 16 |
| Elastomers | Buna nitrile, FDA (CFR) 21, 177.2600<br>EPDM, FDA (CFR) 21, 177.2600 |
| Strainer screen | Stainless Steel, 300 series |



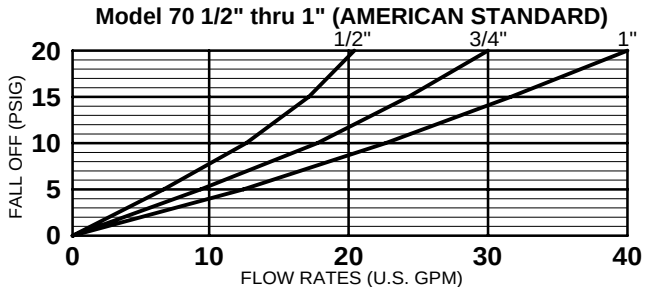

## DIMENSIONS & WEIGHTS (do not include pkg.)

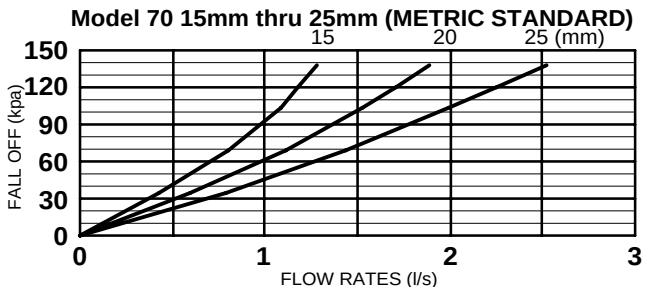
| SIZE | | CONNECTIONS | DIMENSIONS (approximate) | | | | | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | A | | B | | C | | D | | | |
| in. | mm | | in. | mm | in. | mm | in. | mm | in. | mm | lbs. | kg. |
| 1/2 | 15 | SINGLE UNION | 4 1/2 | 114 | 6 | 152 | 1 | 25 | 2 3/4 | 70 | 3 | 1.5 |
| 1/2 | 15 | LESS UNION | 3 3/8 | 86 | 6 | 152 | 1 | 25 | 2 3/4 | 70 | 3 | 1.5 |
| 1/2 | 15 | DOUBLE UNION | 4 9/16 | 116 | 6 | 152 | 1 | 25 | 2 3/4 | 70 | 3 | 1.5 |
| 3/4 | 20 | SINGLE UNION | 4 1/8 | 105 | 6 1/2 | 165 | 1 1/8 | 31 | 2 3/4 | 70 | 4 | 1.5 |
| 3/4 | 20 | LESS UNION | 3 1/4 | 83 | 6 1/2 | 165 | 1 1/8 | 31 | 2 3/4 | 70 | 3 | 2.0 |
| 3/4 | 20 | DOUBLE UNION | 5 15/16 | 151 | 6 1/2 | 165 | 1 1/8 | 31 | 2 3/4 | 70 | 3 | 1.5 |
| 1 | 25 | SINGLE UNION | 4 15/16 | 125 | 6 3/4 | 172 | 1 1/8 | 31 | 3 5/16 | 84 | 4 | 1.5 |
| 1 | 25 | LESS UNION | 3 5/8 | 92 | 6 3/4 | 172 | 1 1/8 | 31 | 3 5/16 | 84 | 5 | 2.0 |
| 1 | 25 | DOUBLE UNION | 5 15/16 | 151 | 6 3/4 | 172 | 1 1/8 | 31 | 3 5/16 | 84 | 4 | 2.5 |



DOCUMENT NO. REG-70 REV. 10/99

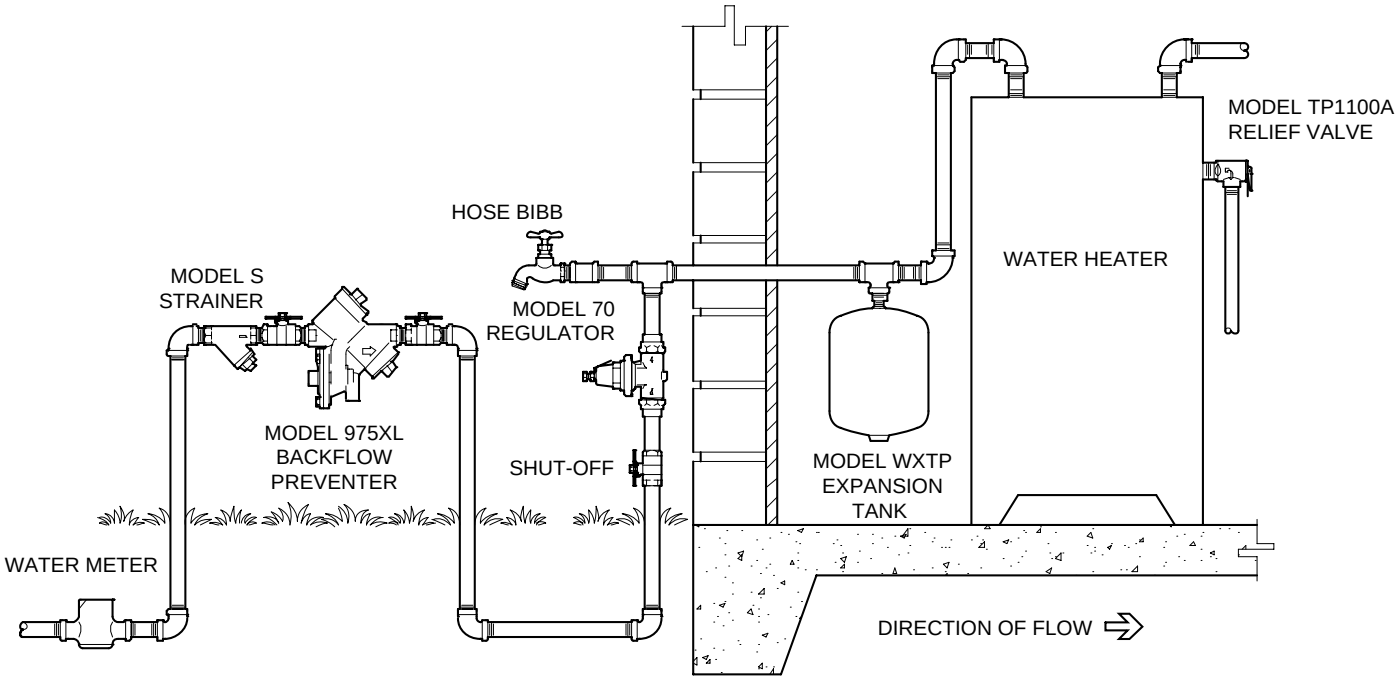
## FLOW CHARACTERISTICS




### TYPICAL INSTALLATION

Local codes shall govern installation requirements. Unless otherwise specified, the assembly shall be mounted in accordance with the manufacturer's 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 70 may be installed in any position. If installed in a pit, vault or indoors, 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.




**TYPICAL INSTALLATION**

### SPECIFICATIONS

The pressure reducing valve shall be, of the direct-acting type and ASSE® 1003 Listed. The integral by-pass check valve main body and bell housing shall be cast bronze (ASTM B 584). The pressure reducing valve shall be of the balanced piston design and shall reduce pressure in both flow and no-flow conditions using an adjusting bolt. All internal parts shall be corrosion resistant and included in a replaceable cartridge. The bronze bell housing shall be threaded to the body and shall not require the use of ferrous screws. The pressure reducing valve shall be a WILKINS Model 70.



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