



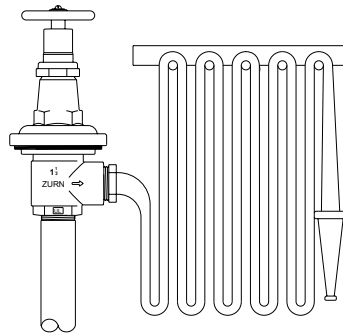
# Zurn Wilkins Fire Protection Solutions

Zurn Wilkins Pressure-Tru® Pressure Reducing Hose and Sprinkler Valves are designed for installation flexibility with globe or angle body configurations and grooved or threaded connections.

## Pressure-Tru Pressure Reducing Hose Valves

Designed for use as a standpipe valve for individual hose stations.

- Regulates pressure under both flow and no-flow conditions
- Local thread options available
- UL® and C-UL® Listed



Field Adjustable



Z2100, 1-1/2"



Z3000, 2-1/2"

Factory Set



ZW4100, 1-1/2"

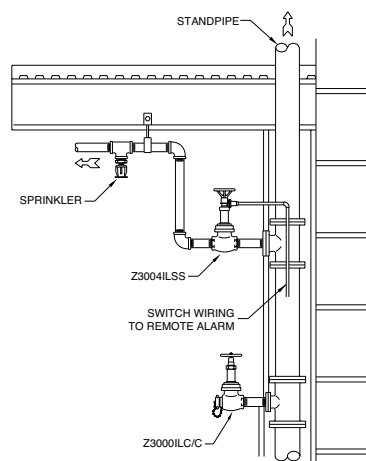


ZW4000, 2-1/2"

## Pressure-Tru Pressure Reducing Sprinkler Valves

Designed for use as a floor control valve, indicating valve, and check valve in automatic sprinkler systems, as well as a standpipe valve.

- Regulates pressure under both flow and no-flow conditions
- Available with or without supervisory switch (SS option)
- UL and C-UL Listed



Field Adjustable



Z3004, 2-1/2"



Z3004ILSS, 2-1/2"

Factory Set



ZW4104, 1-1/2"



ZW4004IL, 2-1/2"

## Pressure-Tru® Sprinkler and Hose Valve Operation

Pressure-Tru valves reduce high inlet pressure to a lower downstream pressure.

- Valve opening force is created by high pressure (A) pushing against the plunger (1). The Z2100 and Z3000 are equipped with an adjustable spring (2) to assist.
- Closing force is created by downstream pressure (B) transferred through an orifice in the stem (4) and acting upon the large piston area (3).
- The balance of opening force and closing force result in pressure regulation.

Under normal conditions, the downstream side (B) is pressurized, holding the valve in the closed position. In the event of water demand from a discharging sprinkler head or hose nozzle, the lower downstream pressure decreases, allowing the valve to open. The valve will modulate between open and closed to satisfy both demand and pressure.

For service and maintenance, manually hold valve in the closed position by rotating the hand wheel (5), which forces the plunger onto the seat.

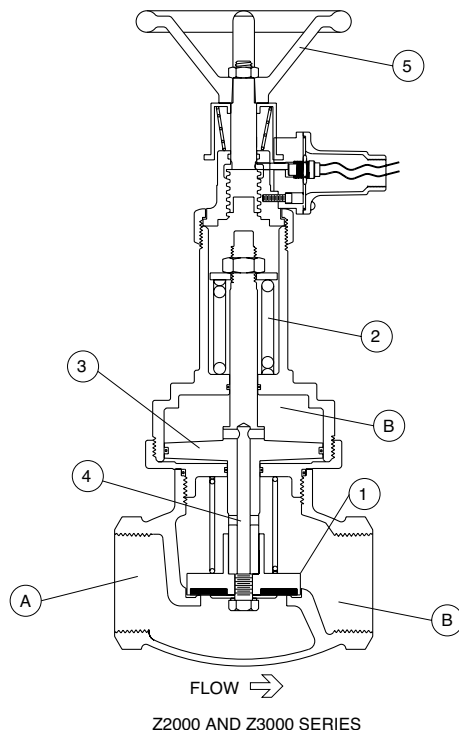
Monitoring options include the integral supervisory switch (SS) to monitor the open/closed position of the valve, or bracket (MSA) to mount an external supervisory switch.

## Z2100 and Z3000 Series Field Setting Features

- Field adjusting is accomplished with a tamper resistant adjusting nut, and is adjusted with a socket and ratchet.
- Can be adjusted without draining the standpipe or system, speeding adjustment
- Ideal for installations requiring adjustability of outlet pressure
- Factory set available if required

**CAUTION:** To prevent a false reading during the setting process it is necessary that a test valve be opened and closed downstream to relieve the locked-up pressure in the system.

**NOTE:** NFPA 13 requires a pressure relief valve on sprinkler systems downstream of pressure reducing valves.



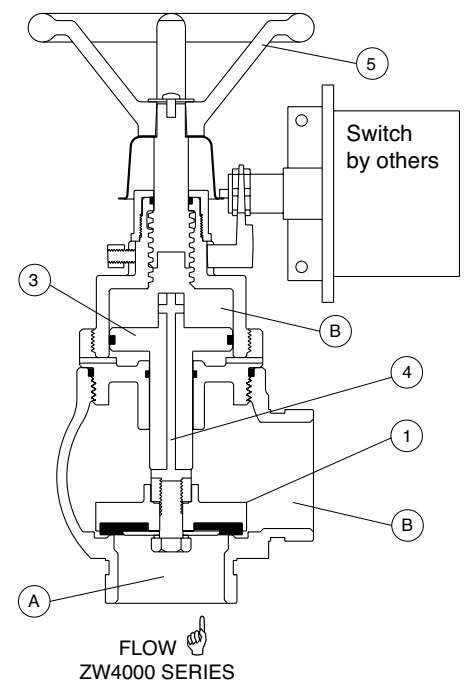
## Choosing the Correct Setting

Refer to Residual Pressure Flow Charts and Static Pressure Charts (available on [zurn.com](http://zurn.com)) and the following procedure to choose the correct setting for each valve:

1. Determine required downstream demand in gallons per minute.
2. Determine standpipe residual or “flow pressure” at the valve inlet.
3. Select appropriate flow chart based on gpm required, valve type, and size.
4. Determine correct setting (letter designation) based on the intersection between valve inlet residual pressure and outlet residual pressure.
5. A minimum of 20 psi pressure differential is recommended to assure efficient system performance (difference between the inlet static pressure and outlet set static pressure).

## Valve Care and Maintenance

- Flush the system to remove any rocks or debris.
- Upon installation, fill system slowly to prevent water hammer.
- Periodically test the valve, allowing it to open and reset.
- Drain system for repair, and remove bell housing and flange to access internal components without removing valve body from system.
- Repair parts available—contact your local Zurn representative.

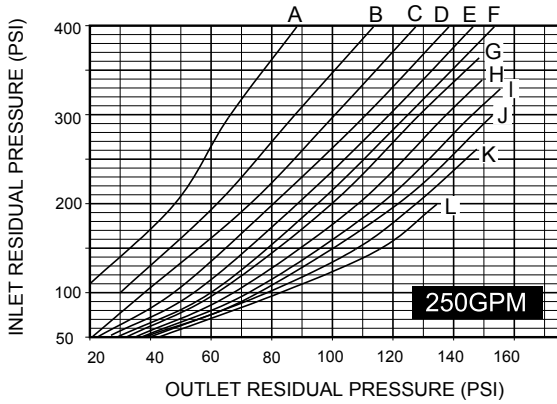


## Residual Pressure Flow Charts

Below are the most frequently used residual pressure flow charts. Visit [zurn.com](http://zurn.com) for a complete listing of flow charts by model.

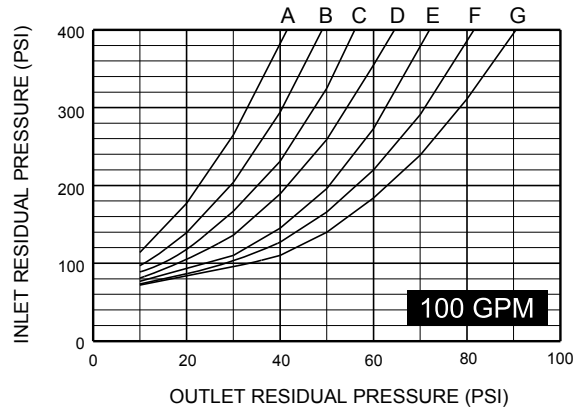
### Models Z3000, Z30004, and Z3005

2-1/2" Angle and In-Line Pressure Reducing Hose Valve, 250 gpm



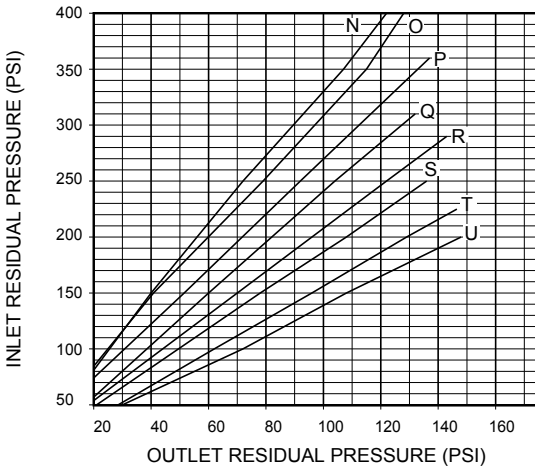
### Models Z2100 and Z2105

1-1/2" Pressure Reducing Fire Hose Valve, 100 gpm



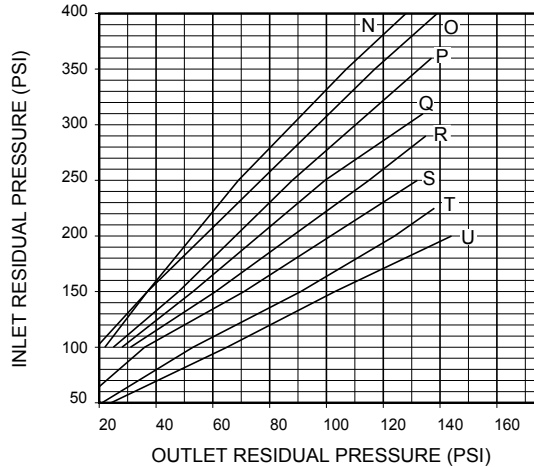
### Models ZW4000 and ZW4004

2-1/2" Angle Body and Angle Body Grooved Pressure Reducing Sprinkler Valve, 201-300 gpm



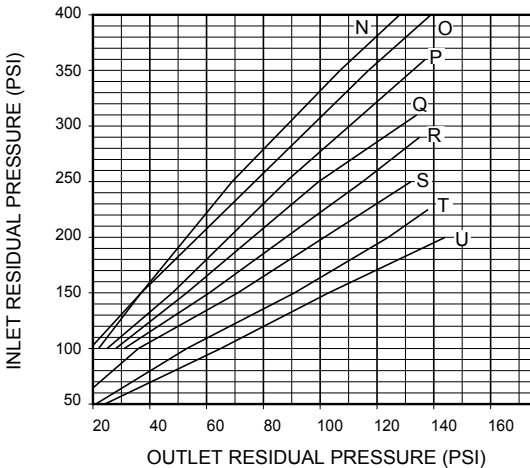
### Models ZW4000IL and ZW4004IL

2-1/2" In-Line NPT Pressure Reducing Sprinkler Valve, 201-300 gpm



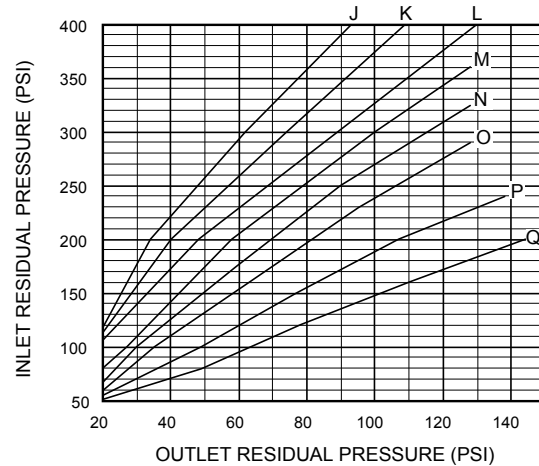
### Models ZW4000ILG and ZW4004ILG

2-1/2" In-Line Grooved Pressure Reducing Fire Hose Valve, 201-300 gpm



### Models ZW4100 and ZW4104

1-1/2" Angle Pressure Reducing Sprinkler Valve, 76-125 gpm



# Zurn Wilkins Fire Protection Solutions

Zurn manufactures smart fire protection solutions that are easily serviced and provide the lowest lifecycle costs. Zurn delivers industry-leading water safety and pressure management solutions with our Zurn Wilkins backflow prevention devices and pressure reducing valves. Zurn offers a complete line of complementary products to enhance the service life of your fire protection system.



## Automatic Control Valves

- Valve design focused on simplifying maintenance with standard features that enhance total cost of ownership
- Approved in globe and angle bodies in sizes up to 10"
- ZW209FPG Pressure Reducing Automatic Control Valve - UL Listed
- ZW205FP Pressure Relief Valve - UL Listed, FM® Approved
- ZW215FP Fire Pump Suction Control Valve - FM Approved



## Relief Valve

- P4000A Pressure Relief Valve for thermal expansion in fire systems
- UL Listed, FM Approved



## Backflow Prevention

- Innovative, simple, and proven designs offer the lowest head loss, ease of maintenance, and overall lowest lifecycle costs
- 375ASTDA Reduced Pressure Detector Assembly - UL Classified, FM Approved
- 950XLT DABFSS Double Check Detector Assembly with Butterfly Valves and Supervisory Switches - UL Classified
- 375ASTDAR and 350ASTDAR Custom Length Replacement Series - UL Classified, FM Approved



## WBR In Building Riser

- Available in sizes 4" - 10" with flanged or grooved end connections
- UL Listed, FM Approved



## Model 49 Butterfly Valve

- The Model 49 Butterfly Valve with integral supervisory switch and visual indicator is ideal for use in fire systems
- Available with grooved or flanged end connections, as well as combination (grooved x flanged, flanged x grooved)
- Weatherproof actuator for indoor or outdoor installations
- Lead-free for combination systems, UL Listed, FM Approved

Visit [zurn.com](http://zurn.com) for more information on our entire line of fire protection solutions.

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