



#### APPLICATION

The Pressure-Tru™ ZW4100 Series Pressure Reducing Valve is listed as a standpipe valve for individual hose stations in CLASS II systems. Regulates pressure under both flow and no-flow conditions.

#### STANDARDS COMPLIANCE

- UL® Listed
- C-UL® Listed

#### MATERIAL

Castings/internals Cast bronze ASTM B 584  
 Elastomers Buna Nitrile (FDA approved)  
 EPDM (FDA approved)

#### OPTIONS

(Suffixes can be combined)

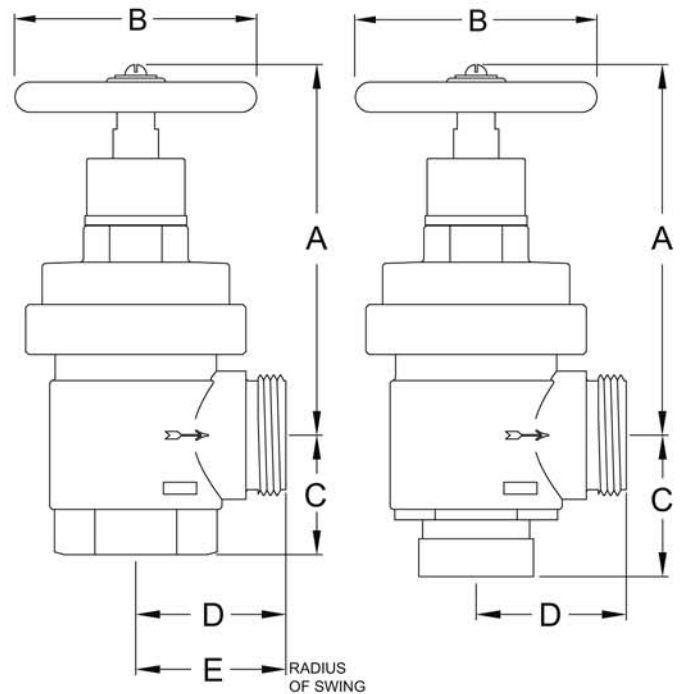
- ☑ ZW4100 - angle type valve
- ☑ G - with grooved inlet connection
- ☑ CC - with cap and chain
- ☑ CH - with rough chrome finish
- ☑ ST - with specified hose thread

#### FEATURES

Sizes: ☑ 2 1/2"  
 Maximum inlet pressure 400 psi  
 End connections (FNPT) ANSI B1.20.1  
 (Grooved) AWWA C606  
 Manufactured in the USA  
 Factory Set



ZW4004GSS



ZW4100

ZW4100G

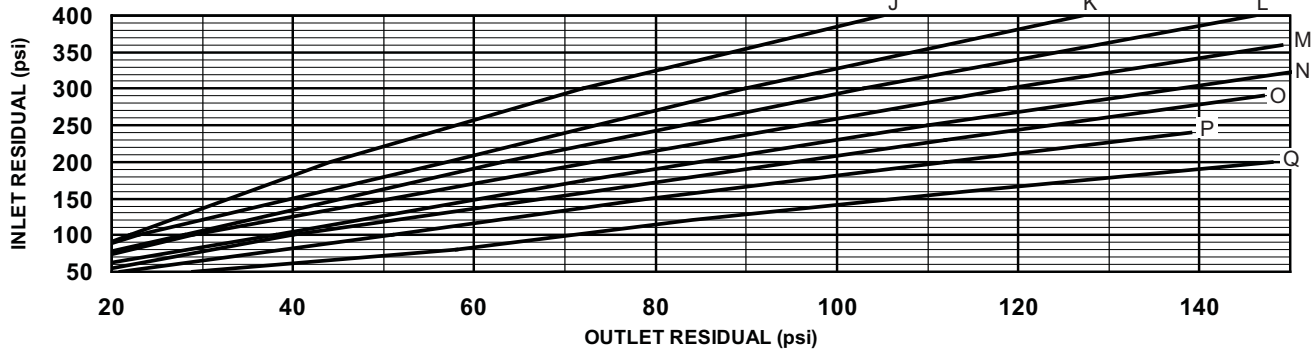
#### DIMENSIONS & WEIGHTS (do not include pkg.)

| MODEL   | DIMENSIONS (approximate) |     |          |     |     |     |       |    |       |    |       |     |        |    |
|---------|--------------------------|-----|----------|-----|-----|-----|-------|----|-------|----|-------|-----|--------|----|
|         | A OPEN                   |     | A CLOSED |     | B   |     | C     |    | D     |    | E     |     | WEIGHT |    |
|         | in.                      | mm  | in.      | mm  | in. | mm  | in.   | mm | in.   | mm | in.   | mm  | lbs    | kg |
| ZW4100  | 6 3/4                    | 171 | 6 1/8    | 155 | 4   | 101 | 2     | 51 | 2 1/2 | 63 | 2 5/8 | 68  | 9      | 4  |
| ZW4100G | 6 3/4                    | 171 | 6 1/8    | 155 | 4   | 101 | 2 3/8 | 60 | 2 1/2 | 63 | n/a   | n/a | 9      | 4  |

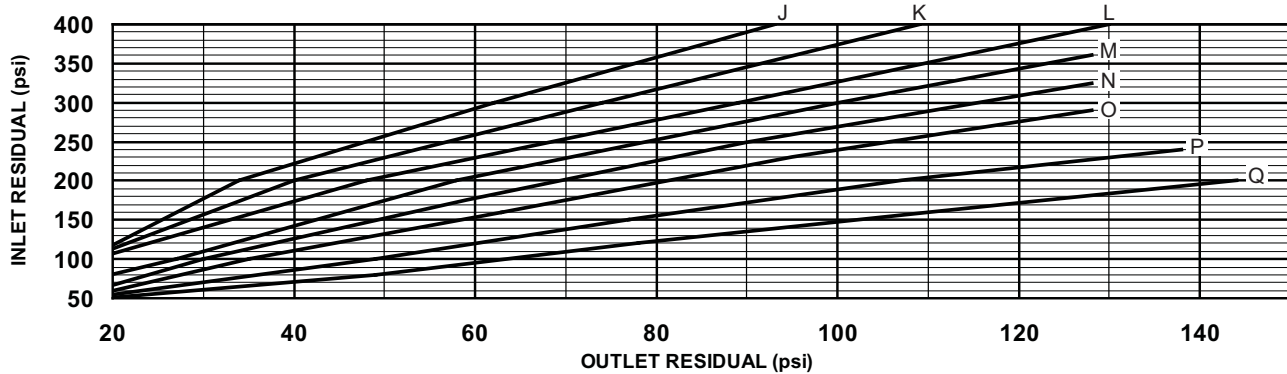
# Residual Pressure Charts

For Pressure-Tru® 1 1/2" Models: ZW4100, ZW4100G, ZW4104 & ZW4104G

**ZW4100 SERIES  
25-75 GPM**



**ZW4100 SERIES  
76-125 GPM**



## CHOOSING THE CORRECT SETTINGS

In designing a sprinkler system, a minimum of 20 psi pressure differential (the difference between the inlet static pressure and the valve outlet set static pressure) is recommended to assure a well regulated and efficient system. In choosing the correct setting for the Pressure-Tru® valve, refer to the Residual Pressure Charts, Static Pressure Chart and the following procedures:

1. Determine the demand in gallons per minute required downstream of the valve.
2. Determine the standpipe residual or "flow pressure" at the valve inlet.
3. Locate the appropriate flow chart based on GPM required and body style.
4. Locate the inlet residual pressure on the vertical axis of the chart and draw a horizontal line from this pressure across the chart.
5. Locate the desired valve outlet residual pressure on the horizontal axis of the chart and draw a vertical line from this pressure.
6. The curve nearest the intersection of the two lines drawn is the appropriate type for the valve.
7. To determine the static outlet pressure, locate the static chart. Determine the valve inlet static pressure shown on the vertical axis and draw a horizontal line from that pressure to the appropriate curve determined above, then draw a vertical line down to the horizontal axis and read the static outlet pressure.

## MAXIMUM RATED INLET PRESSURE

Maximum inlet pressure, to assure a maximum outlet pressure of 175 psi. Inlet side of valves can be safely tested up to 400 PSI during system hydrostatic leak test.

| Bonnet Type | Max Inlet Pressure<br>psi (kpa) |        |
|-------------|---------------------------------|--------|
| J           | 400                             | (2750) |
| K           | 400                             | (2750) |
| L           | 400                             | (2750) |
| M           | 360                             | (2475) |
| N           | 325                             | (2240) |
| O           | 290                             | (2000) |
| P           | 240                             | (1650) |
| Q           | 200                             | (1375) |

Proper performance is dependent upon licensed, qualified personnel performing regular, periodic testing according to WILKINS' specifications and prevailing governmental & industry standards and codes and upon following these installation instructions. Failure to do so releases WILKINS of any liability that it might otherwise have with respect to that device. Such failure could also result in an improperly functioning device.

WILKINS a Zurn company, 1747 Commerce Way, Paso Robles, CA 93446 Phone: 805-238-7100 Fax: 805-238-5766

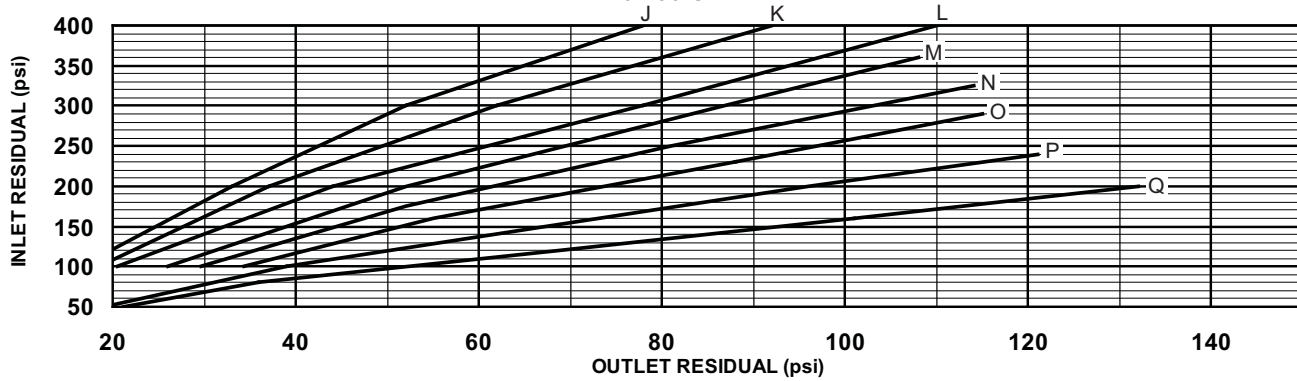
IN CANADA: ZURN INDUSTRIES LIMITED, 3544 Nashua Dr., Mississauga, Ontario L4V 1L2 Phone: 905-405-8272 Fax: 905-405-1292

Product Support Help Line: 877-BACKFLOW (877-222-5356) • Website: <http://www.zurn.com>

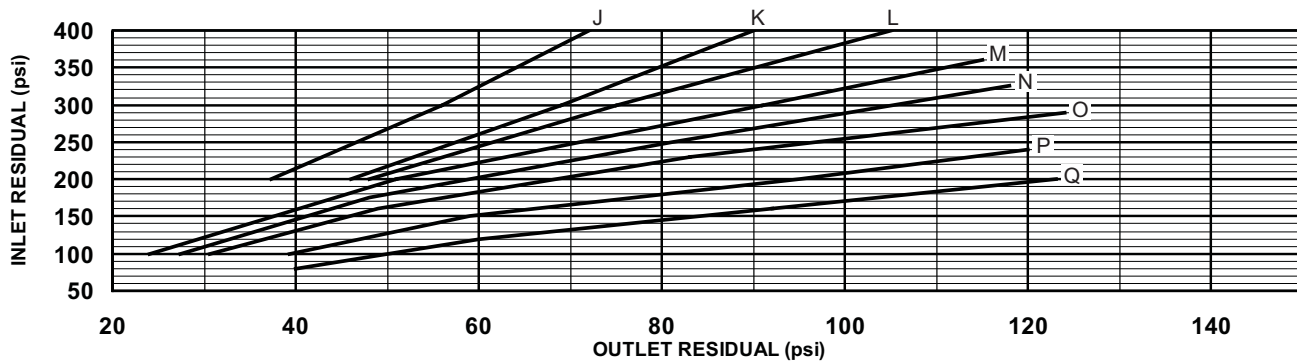
# Residual Pressure Charts

For Pressure-Tru® 1 1/2" Models: ZW4100, ZW4100G, ZW4104 & ZW4104G

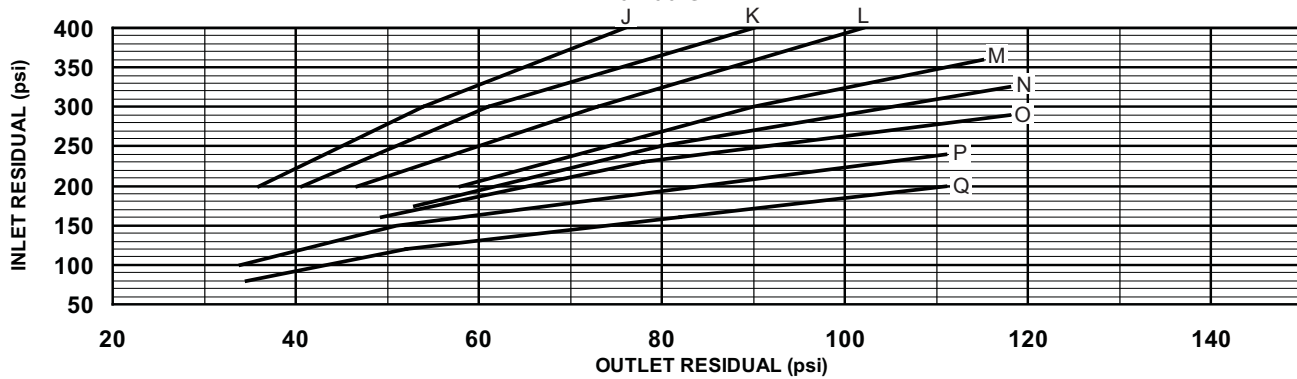
**ZW4100 SERIES**  
126-150 GPM



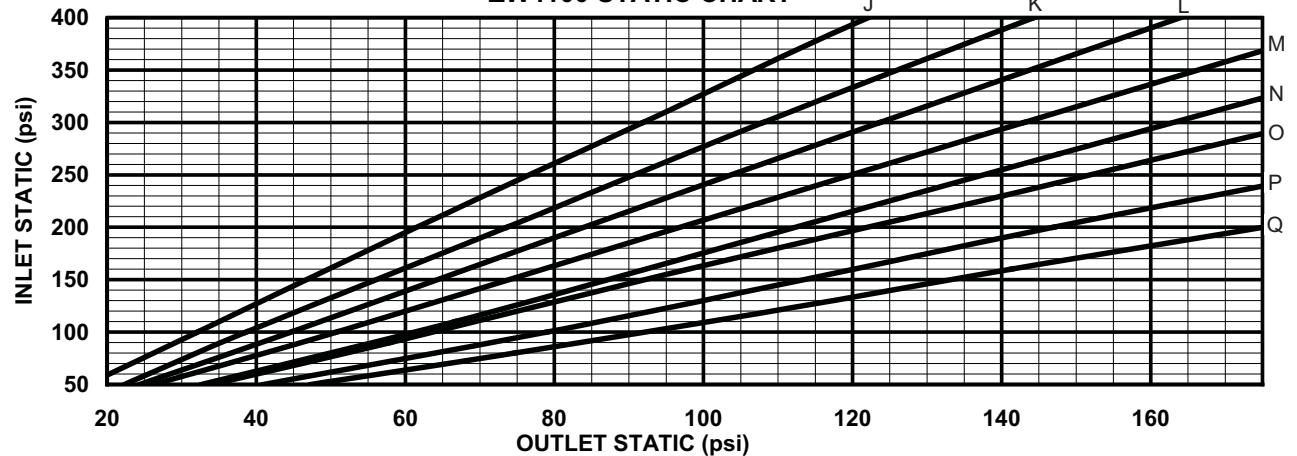
**ZW4100 SERIES**  
151-175 GPM



**ZW4100 SERIES**  
176-200 GPM



**ZW4100 STATIC CHART**



# ZW4100 Series Fire Valve Part Number Assistant



Check off the boxes that match the choices you want. If the choice is blank, this is standard and you add nothing to the part number. If there are letters after the check box, then you add those letters to the part number in that order from left to right.

A bonnet setting has to be part of the part number since the ZW4100 series valves are factory set and not field adjustable. The flow curves **Must** be used by the system designer to select the correct bonnet setting.

**Example**  
 1-1/2" ZW4104 Sprinkler Floor Control Valve or Hose Rack Valve (Factory Set) (choose one)

|   |  |   |  |  |
|---|--|---|--|--|
| Angle Body<br><input checked="" type="checkbox"/> | Threaded Ends<br><input checked="" type="checkbox"/> | <input type="checkbox"/> <b>SS</b> Supervisory Switch | Bonnet Setting Type  |  |
| (choose one)                                      | Grooved Ends<br><input type="checkbox"/> <b>G</b>    | Monitor Switch<br>Adapter Bracket                     | No Handwheel<br>Capped Bonnet  | <input type="checkbox"/> -J <input type="checkbox"/> -K <input type="checkbox"/> -L            |
|   | (choose one)   | <input checked="" type="checkbox"/> <b>MSA</b>        | <input type="checkbox"/> <b>CAP</b>  | <input checked="" type="checkbox"/> -M <input type="checkbox"/> -N <input type="checkbox"/> -O |
|   |  | (choose one or none)                                  | Rough<br>Chrome Plated<br><input type="checkbox"/> <b>CH</b><br>(optional) | <input type="checkbox"/> -P <input type="checkbox"/> -Q  |

In this example the part number would be ZW4104MSA-M

**1-1/2" ZW4100 Standpipe Hose Valve (Factory Set)** (choose one)

|  |  |   |   |   |
|--|--|---|---|---|
| Angle Body<br><input type="checkbox"/> | Threaded Inlet<br><input type="checkbox"/>         | 1-1/2" National Hose thread<br><input type="checkbox"/> | Rough<br>Chrome   | Bonnet Setting Type   |
| (choose one)                           | Grooved Inlet<br><input type="checkbox"/> <b>G</b> | Special Thread<br><input type="checkbox"/> <b>ST</b>    | w/ Cap & Chain Plated<br><input type="checkbox"/> <b>CC</b> | <input type="checkbox"/> -J <input type="checkbox"/> -K <input type="checkbox"/> -L |
|  | (choose one)                                       | (choose one)  | <input type="checkbox"/> <b>CH</b><br>(optional)            | <input type="checkbox"/> -M <input type="checkbox"/> -N <input type="checkbox"/> -O |
|  | Specify special thread _____                       | (optional)  |   | <input type="checkbox"/> -P <input type="checkbox"/> -Q                             |

**1-1/2" ZW4104 Sprinkler Floor Control Valve or Hose Rack Valve (Factory Set)** (choose one)

|  |   |   |  |   |
|--|---|---|--|---|
| Angle Body<br><input type="checkbox"/> | Threaded Ends<br><input type="checkbox"/>         | <input type="checkbox"/> <b>SS</b> Supervisory Switch | Bonnet Setting Type  |   |
| (choose one)                           | Grooved Ends<br><input type="checkbox"/> <b>G</b> | Monitor Switch<br>Adapter Bracket                     | No Handwheel<br>Capped Bonnet  | <input type="checkbox"/> -J <input type="checkbox"/> -K <input type="checkbox"/> -L |
|  | (choose one)                                      | <input type="checkbox"/> <b>MSA</b>                   | <input type="checkbox"/> <b>CAP</b>  | <input type="checkbox"/> -M <input type="checkbox"/> -N <input type="checkbox"/> -O |
|  |   | (choose one or none)                                  | Rough<br>Chrome Plated<br><input type="checkbox"/> <b>CH</b><br>(optional) | <input type="checkbox"/> -P <input type="checkbox"/> -Q                             |

Specify if the body should be tapped and plugged for gauges.

| Qty | Part number | Notes |
|-----|-------------|-------|
|     |             |       |
|     |             |       |
|     |             |       |
|     |             |       |