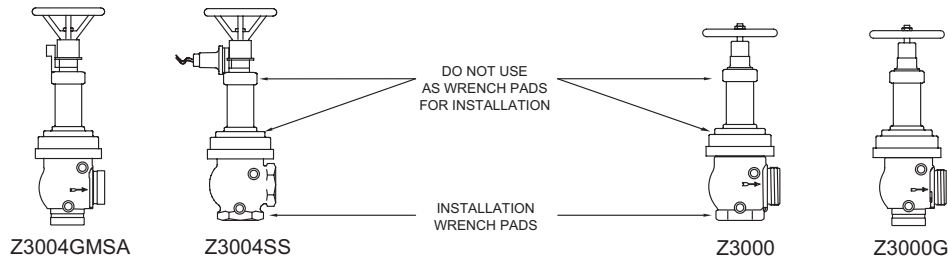


Model Z3000, Z3004 & Z3005

For Pressure-Tru™ 2 1/2" Pressure Reducing Valve
Angle Bodies, Grooved or Threaded



□ Installation □ Testing □ Maintenance Instructions



Model Z3004 Series

APPLICATION:

The Z3004 Series Pressure Reducing Valve is UL® Listed and C-UL® Listed as a floor control valve in automatic sprinkler systems as well as a standpipe valve for CLASS I and CLASS III systems.

SPECIFICATIONS:

- Rated up to 400 psi inlet pressure
- Can be adjusted in the field
- Open-Close indicating feature
- Built-in automatic checking device
- Regulates pressure under both flow and no-flow conditions
- Available with monitor switch adapter
- 2½" female inlet and outlet connections
- Available with integral supervisory switch
- Tapped and plugged inlet and outlet for pressure gauge

OPTIONS:

(options can be combined)

Z3004	Angle type valve
IL	In-line (globe type) valve
G	Grooved inlet and outlet connections
SS	With integral supervisory switch
MSA	With monitor switch adapter
CH	With rough chrome finish

Model Z3000 and Z3005 Series

APPLICATION:

The Z3000 and Z3005 Series Pressure Reducing Valves are UL® Listed and C-UL® Listed as standpipe valves for CLASS I and CLASS III systems.

SPECIFICATIONS:

- Rated up to 400 psi inlet pressure
- Can be adjusted in the field
- Regulates pressure under both flow and no-flow conditions
- Available with cap and chain
- Tapped and plugged inlet and outlet for pressure gauge

OPTIONS:

(options can be combined)

Z3000CH	Angle type hose valve
IL	In-line (globe type) hose valve
G	Grooved inlet connections
SF	With San Francisco hose threads (2½" x 3")
C/C	With cap and chain
CH	With rough chrome finish
ST	With special hose thread
Z3005CH	Female NPT inlet and outlet angle valve
IL	Female NPT inlet and outlet in-line valve
CAP	With capped bonnet
CH	With rough chrome finish

The MSA bracket can be used with the following supervisory switches.

Potter Roemer	6223
System Sensor	PIBV2
Potter Electric	PCVS
Guardian	9391
Crocker	8152

NOTE: Installation:

Proper installation of these valves shall be in accordance with NFPA 13 and/or NFPA 14, whichever is applicable. Valves installed in sprinkler systems shall not be set for less than 50 psi. Valve may be installed in any position.

Inspection, Testing & Maintenance:

Proper inspection, testing and maintenance of these valves shall be in accordance with NFPA 25.

For Class I & Class III Standpipe Systems:

- A. The outlet pressures indicated in the illustrations on pages 2-3 are at the outlet of the valve. To determine the pressure at a specific hose nozzle, the hydraulic calculation information provided in NFPA 13 and the NFPA Fire Protection Handbook, should be followed. In any case, the design flow demand required from the hose nozzle shall not exceed the flow range specified in the illustrations on pages 2-3.
- B. The valve may be adjusted to provide residual pressures less than 100 psig (689 kpa), when permitted by the authority having jurisdiction, but not lower than 65 psig (448 kpa).

WARNING: This product contains a chemical known to the State of California to cause cancer, birth defects and other reproductive harm

ADVERTENCIA: Este producto contiene una sustancia química que el Estado de California como causante de cáncer, defectos de nacimiento y otros daños reproductivos

WARNING: This product is NOT Lead Free in accordance with U.S. Federal Law and is illegal in the U.S. for use in potable services or to install in water systems anticipated for human consumption.

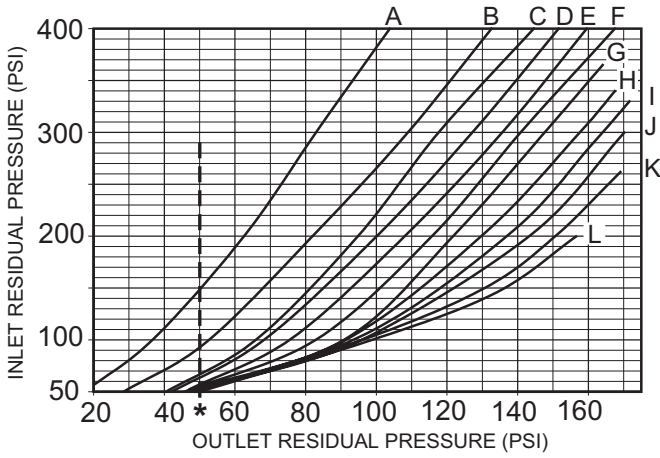
Residual Pressure Charts

For Pressure-Tru™ 2 1/2" Angle Valves

Models: Z3000, Z3004, Z3005, Z3000G & Z3004G

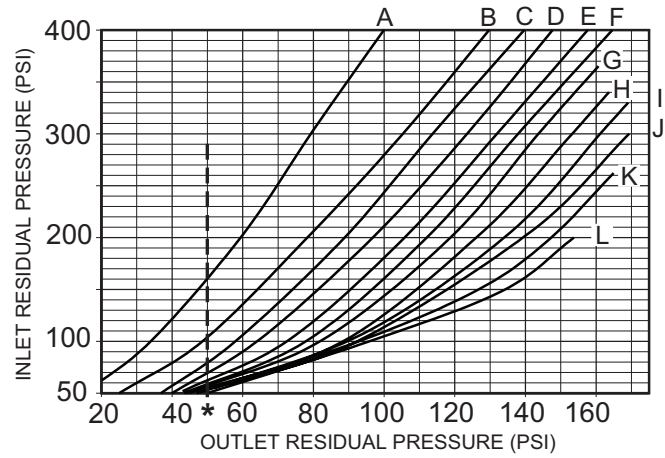
Z3000 SERIES ANGLE BODY

50GPM



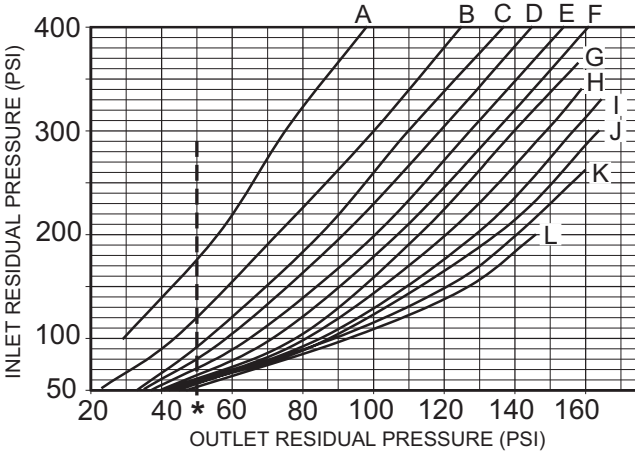
Z3000 SERIES ANGLE BODY

100GPM



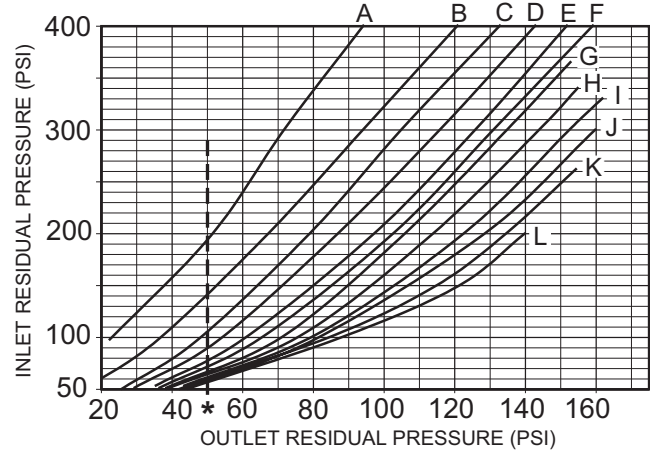
Z3000 SERIES ANGLE BODY

150GPM



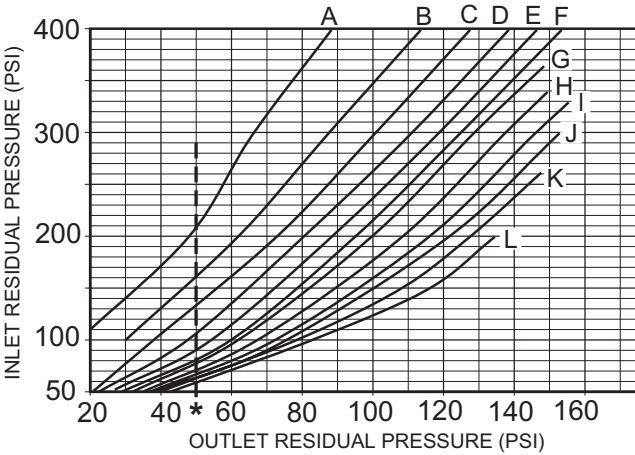
Z3000 SERIES ANGLE BODY

200GPM



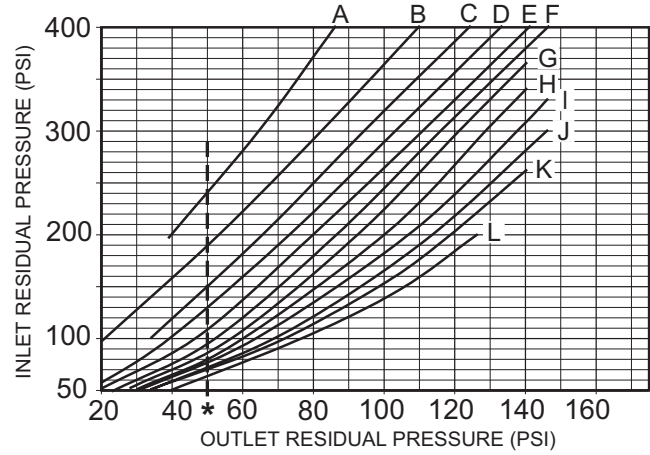
Z3000 SERIES ANGLE BODY

250GPM



Z3000 SERIES ANGLE BODY

300GPM



"A" DIMENSION SETTINGS (inches)

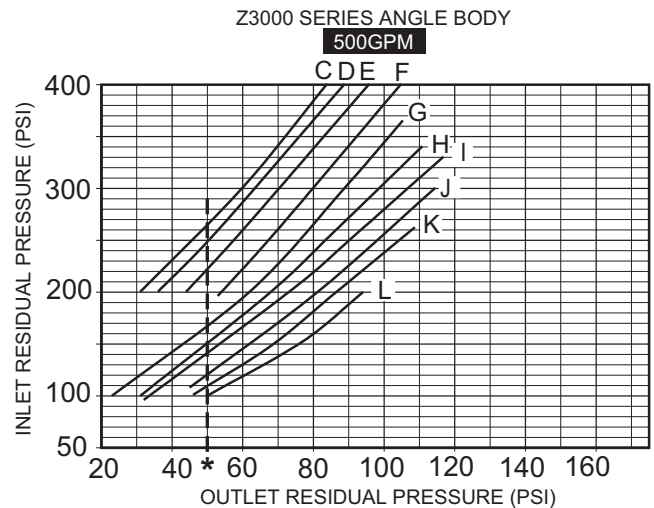
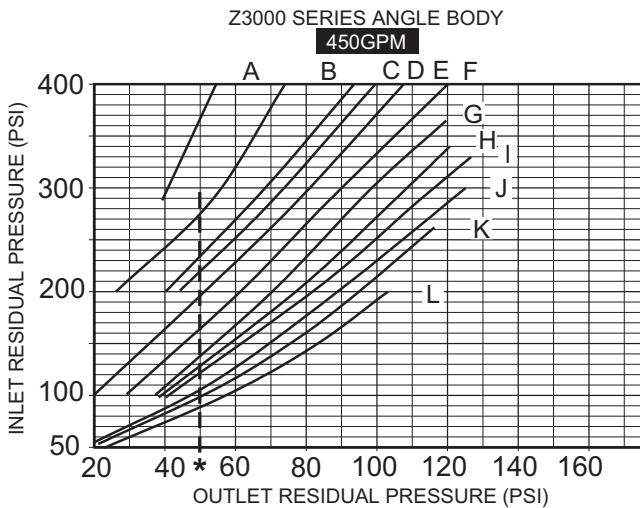
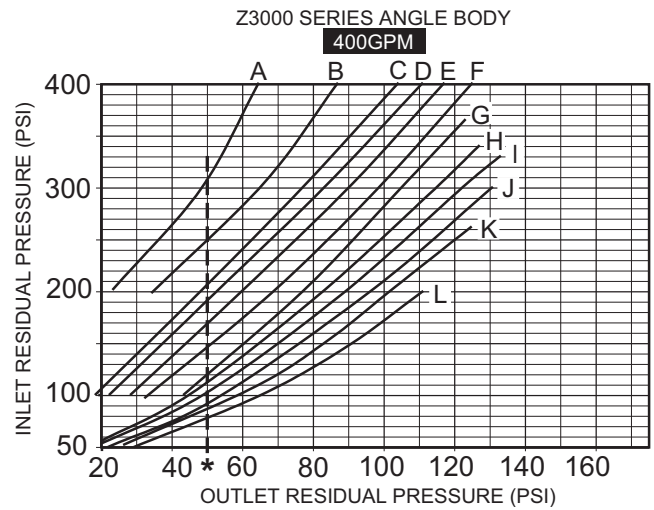
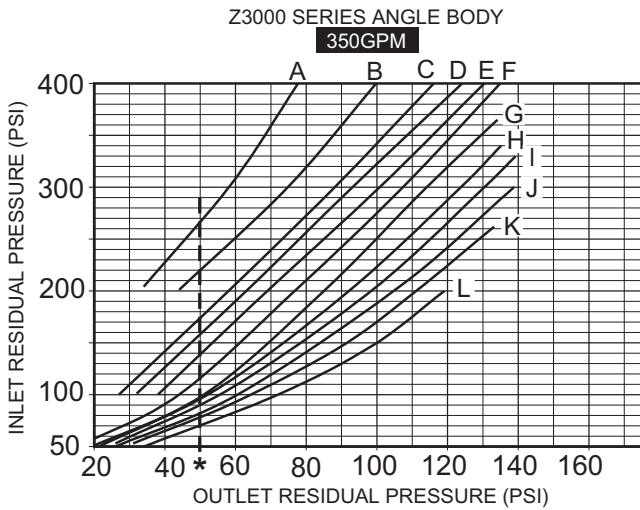
A	B	C	D	E	F	G	H	I	J	K	L
3/8	1/2	5/8	11/16	3/4	13/16	7/8	15/16	1	1-1/16	1-1/8	1-3/16

Note: Curve accuracy = ± 5 PSIG *50 PSI Minimum setting for sprinkler systems

Residual Pressure Charts

For Pressure-Tru™ 2 1/2" Angle Valves

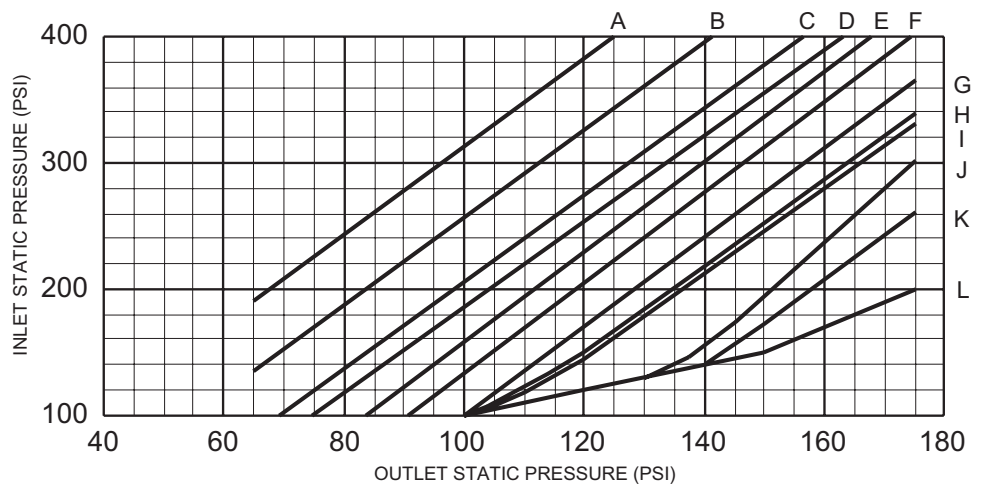
Models: Z3000, Z3004, Z3005, Z3000G & Z3004G



STATIC PRESSURE CHART

For Pressure-Tru™ Angle and In-line Valves
(2-1/2" Inlet and Outlet)

MODELS:
Z3000, Z3004 AND Z3005
(ALL)



"A" DIMENSION SETTINGS (inches)											
A	B	C	D	E	F	G	H	I	J	K	L
3/8	1/2	5/8	11/16	3/4	13/16	7/8	15/16	1	1-1/16	1-1/8	1-3/16

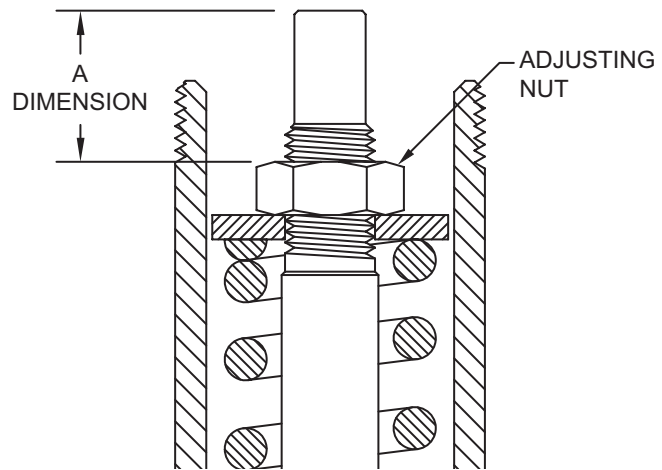
Note: Curve accuracy = ± 5 PSIG *50 PSI Minimum setting for sprinkler systems

FIELD SETTING INSTRUCTIONS

1. Pressure gauges should be installed upstream and downstream of the Pressure-Tru™ Valve.
2. Refer to flow data charts on pages 2-3 to determine the proper "A" DIMENSION setting.
3. Open valve by rotating hand wheel counter-clockwise.
4. Remove wheel handle assembly by loosening the upper coupling nut.
5. Insert a 1 1/16" deep well socket (for 2-1/2" valve) or a 15/16 deep-well socket (for 1 1/2" valve) into bell housing and onto adjusting nut.
6. Turn the adjusting nut clockwise to increase the "A" DIMENSION setting and counter-clockwise to reduce the "A" DIMENSION setting. Decreasing the "A" DIMENSION setting lowers the downstream pressure.

NOTE: Do not exceed 175 PSI static or maximum "A" DIMENSION setting of 9/16" (1-1/2" valve) and 1-3/16" (2 -1/2" valve) (see illustration).

7. After installation, the valve shall be tested in accordance with NFPA 14 and tested periodically thereafter in accordance with NFPA 25.



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

If the system requires the valve to remain in a static position to maintain a regulated dead-end service pressure, it is good engineering practice to incorporate a pressure relief valve within the system.

VALVES WHICH ARE FIELD SET DIFFERENT THAN ABOVE INSTRUCTIONS WILL RENDER THE **WARRANTY VOID.**

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 Charts and the following procedures:

1. Determine the standpipe residual or "flow pressure" at the valve inlet.
2. Determine the demand in gallons per minute required downstream of the valve.
3. Locate the appropriate flow chart based on GPM required, valve type and size.
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 setting for the valve.
7. To determine the static outlet pressure, locate the static chart for the appropriate valve size. 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.

VALVE CARE AND MAINTENANCE

Since the Pressure-Tru™ Valve is an automatic valve, it is imperative to make sure that the system is free of rocks and debris. This can be ensured by flushing the system. Upon completion of valve installation and testing, it is important that it be filled slowly to prevent water hammer. It is recommended that a flow test be run periodically to allow the Pressure-Tru™ Valve to open and reset itself. If valve repair is required, the system should be drained. Access to internal components can be achieved by removing the wheel handle assembly, adjusting nut, spring, bell housing and flange. The body need not be removed from the system. Contact the factory for repair parts.

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