



Model ZW4000

Pressure-Tru™ Fire Hose Valve

Application

The Pressure-Tru™ ZW4000 Series Pressure Reducing Valve is listed as a standpipe valve for individual hose stations in CLASS I and CLASS III systems. Regulates pressure under both FLOW and NO-FLOW conditions.

Standards Compliance

- UL® Listed
- C-UL® Listed
- NYC MEA 325-06-E
- City of Los Angeles Approved

Material

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



ZW4000



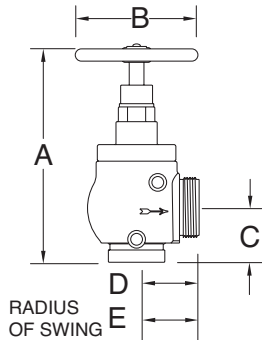
ZW4000G

Features

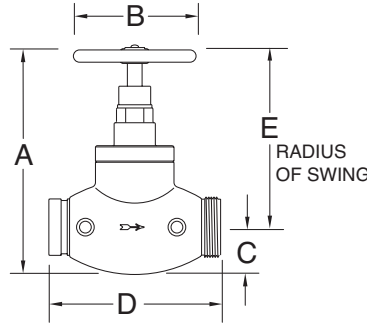
Sizes: 2 1/2"
 Maximum inlet pressure 400 psi
 Inlet connection: (FNPT) or ANSI B1.20.1
 (Grooved) AWWA C606
 Outlet connection: Male Hose (NH) NFPA 1963
 Factory Set
 Tapped and plugged inlet and outlet for pressure gauge.

Options

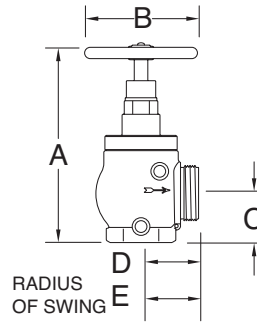
- (Suffixes can be combined)
- ZW4000 - angle type valve
 - IL - in-line (globe type) valve
 - G - with grooved inlet connection
 - SF - with San Francisco hose thread (3")
 - ST - with specified hose thread
 - CC - with cap and chain
 - CH - with chrome finish



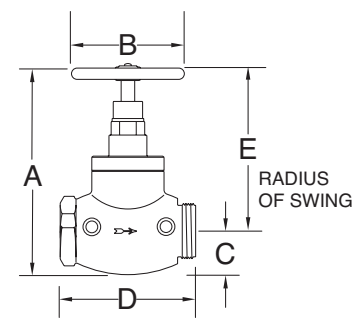
ZW4000G



ZW4000ILG



ZW4000



ZW4000IL

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
ZW4000	10 7/8	276	10	254	6 1/4	159	2 3/4	70	3 3/16	81	3 1/2	89	19	8.6
ZW4000IL	11 1/2	292	10 1/2	267	6 1/4	159	2 3/8	60	7 1/2	191	8 3/16	208	23	10.4
ZW4000G	11 5/16	287	10 7/16	265	6 1/4	159	3 5/16	84	3 3/16	81	3 1/2	89	18	8.1
ZW4000ILG	11 1/2	292	10 1/2	267	6 1/4	159	2 3/8	60	8 3/4	222	8 3/16	208	23	10.4
ZW4000SF	10 7/8	276	10	254	6 1/4	159	2 3/4	70	3 15/16	100	3 1/2	89	19	8.6

SPECIFICATION SUBMITTAL SHEET



FEATURES

Sizes: □ 2 1/2"

Maximum inlet pressure
End connections (FNPT)
(Grooved)
Manufactured in the USA
Factory Set

400 psi
ANSI B1.20.1
AWWA C606

OPTIONS

(Suffixes can be combined)

- angle type valve
- IL - in-line (globe type) valve
- MSA - with monitor switch adapter
- CH - with chrome finish
- T - tapped & plugged inlet and outlet for pressure gauge (not available on angle grooved body)
- CAP - with capped bonnet, no handwheel assembly
- G - with Grooved inlet and outlet connections

APPLICATION

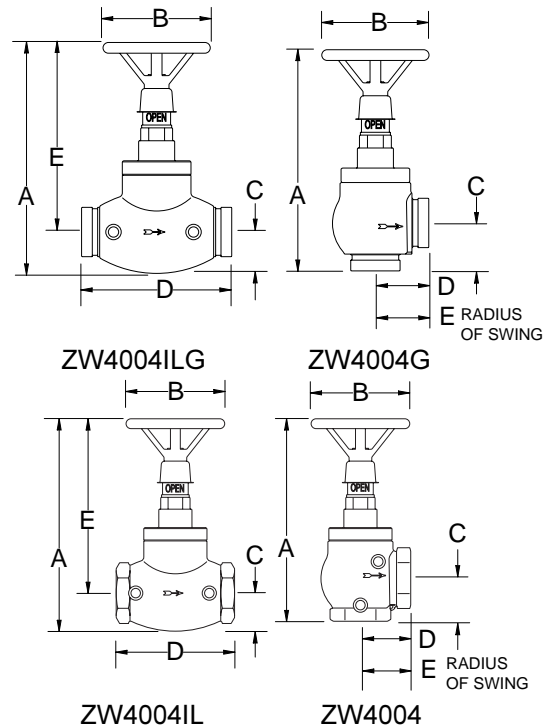
The Pressure-Tru™ ZW4004 Series Pressure Reducing Valve is listed as a floor control valve in automatic sprinkler systems as well as a standpipe valve for CLASS I and CLASS III systems. Regulates pressure under both FLOW and NO-FLOW conditions.

STANDARDS COMPLIANCE

- UL® Listed
- C-UL® Listed

MATERIAL

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



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
ZW4004	12 7/8	327	12	305	6 1/4	159	2 3/4	70	3 3/16	92	3 5/8	92	20	9
ZW4004iL	13 1/2	343	12 1/2	318	6 1/4	159	2 3/8	60	7 1/2	191	8 3/16	208	24	11
ZW4004G	12 7/8	327	12	305	6 1/4	159	2 3/4	70	3 3/16	81	3 5/8	92	19	8.6
ZW4004iLG	13 1/2	343	12 1/2	318	6 1/4	159	2 3/8	60	8 3/4	222	8 3/16	208	24	11
ZW4004CAP	9	229	n/a	n/a	5	127	2 3/4	70	3 3/16	81	3 5/8	92	16	7
ZW4004iLCAP	7 1/4	184	n/a	n/a	5	127	2 3/8	60	7 1/2	191	7 1/4	184	20	9

DOCUMENT #: FV-ZW4004

REVISION: 6/06

ZW4000 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.

A bonnet setting has to be part of the part number since the ZW4000 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

ZW4004 Sprinkler Floor Control Valve (Factory Set) (choose one)

<input type="checkbox"/> Angle Body <input type="checkbox"/> Globe Body <input checked="" type="checkbox"/> IL (choose one)	<input checked="" type="checkbox"/> Threaded Ends <input type="checkbox"/> Grooved Ends <input type="checkbox"/> G (choose one)	<input type="checkbox"/> Monitor Switch <input type="checkbox"/> Adapter Bracket <input checked="" type="checkbox"/> MSA (optional)	<input type="checkbox"/> No Handwheel <input type="checkbox"/> Capped Bonnet <input type="checkbox"/> CAP (optional)	Bonnet Setting Type <input type="checkbox"/> -N <input type="checkbox"/> -O <input type="checkbox"/> -P <input type="checkbox"/> -Q <input type="checkbox"/> -R <input type="checkbox"/> -S <input checked="" type="checkbox"/> -T <input type="checkbox"/> -U
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In this example the part number would be ZW4004ILMSA-T

ZW4000 Hose Valve (Factory Set) (choose one)

<input type="checkbox"/> Angle Body <input type="checkbox"/> Globe Body <input type="checkbox"/> IL (choose one)	<input type="checkbox"/> Threaded Inlet <input type="checkbox"/> Grooved Inlet <input type="checkbox"/> G (choose one)	<input type="checkbox"/> 2-1/2" Hose thread <input type="checkbox"/> 3" Hose thread <input type="checkbox"/> SF (choose size)	<input type="checkbox"/> w/Cap & Chain <input type="checkbox"/> CC (optional)	Bonnet Setting Type <input type="checkbox"/> -N <input type="checkbox"/> -O <input type="checkbox"/> -P <input type="checkbox"/> -Q <input type="checkbox"/> -R <input type="checkbox"/> -S <input type="checkbox"/> -T <input type="checkbox"/> -U
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Specify for a special thread requirement.

ZW4004 Sprinkler Floor Control Valve (Factory Set) (choose one)

<input type="checkbox"/> Angle Body <input type="checkbox"/> Globe Body <input type="checkbox"/> IL (choose one)	<input type="checkbox"/> Threaded Ends <input type="checkbox"/> Grooved Ends <input type="checkbox"/> G (choose one)	<input type="checkbox"/> Monitor Switch <input type="checkbox"/> Adapter Bracket <input type="checkbox"/> MSA (optional)	<input type="checkbox"/> No Handwheel <input type="checkbox"/> Capped Bonnet <input type="checkbox"/> CAP (optional)	Bonnet Setting Type <input type="checkbox"/> -N <input type="checkbox"/> -O <input type="checkbox"/> -P <input type="checkbox"/> -Q <input type="checkbox"/> -R <input type="checkbox"/> -S <input type="checkbox"/> -T <input type="checkbox"/> -U
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Specify if the body should be tapped and plugged for gauges.

Qty	Part number	Notes



Model ZW4004SS

Pressure-Tru™ Automatic Fire Control Valve

Application

The Pressure-Tru™ ZW4004SS Series Pressure Reducing Valve is listed as a floor control valve, an indicating valve, and a check valve in automatic sprinkler systems as well as a standpipe valve for CLASS I and CLASS III systems. Regulates pressure under both flow and no-flow conditions. The valve has a listed supervisory switch built in. Suitable for indoor / outdoor use. Tamper resistant housing can be rotated for easy wiring switch rated 3 amps @ 125 VAC. Normally open contacts are standard.



ZW4004GSS

Standards Compliance

- UL® Listed
- C-UL® Listed
- NYC MEA 325-06-E
- California State Fire Marshall Listed

Options

(Suffixes can be combined)

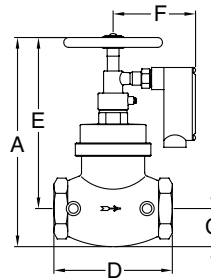
- angle type valve
- IL - in-line (globe type) valve
- G - with grooved inlet and outlet connections
- CH - with chrome finish

Material

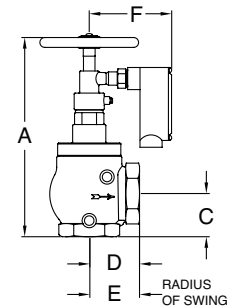
Castings/internals Cast bronze ASTM B 584
 Elastomers Buna Nitrile (FDA approved)
 EPDM (FDA approved)

Features

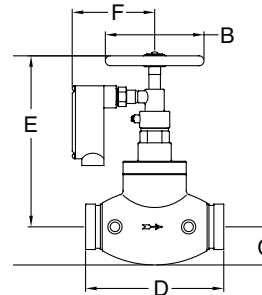
Sizes: 2 1/2"
 Maximum inlet pressure 400 psi
 End connections (FNPT) ANSI B1.20.1
 (Grooved) AWWA C606
 Factory Set
 Tapped & plugged inlet and outlet for pressure gauge



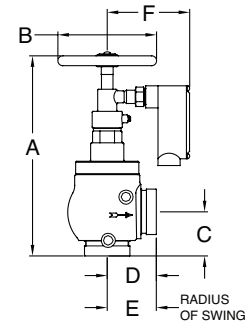
ZW4004ILSS



ZW4004SS



ZW4004ILGSS



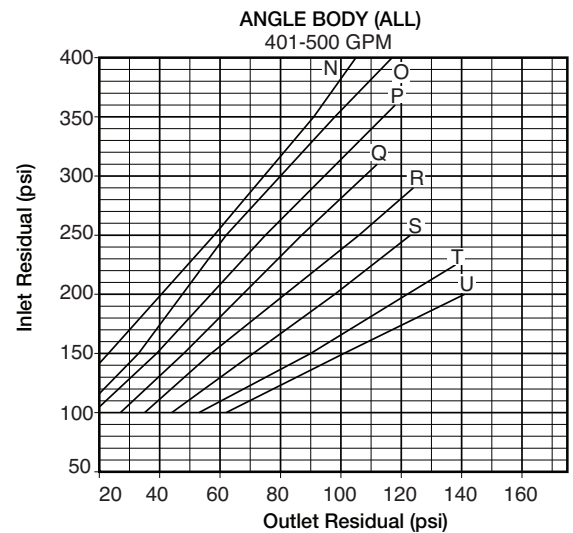
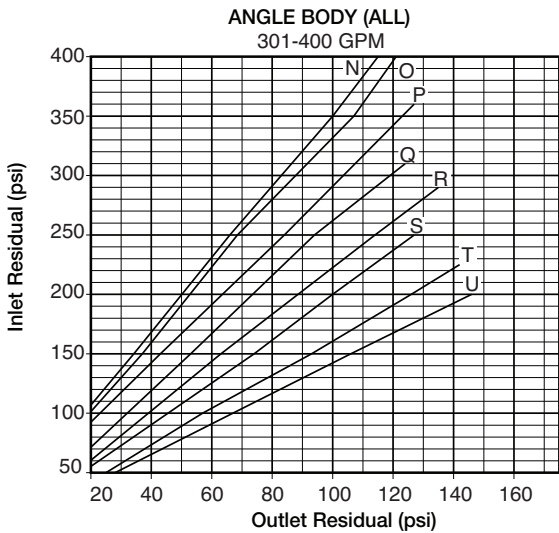
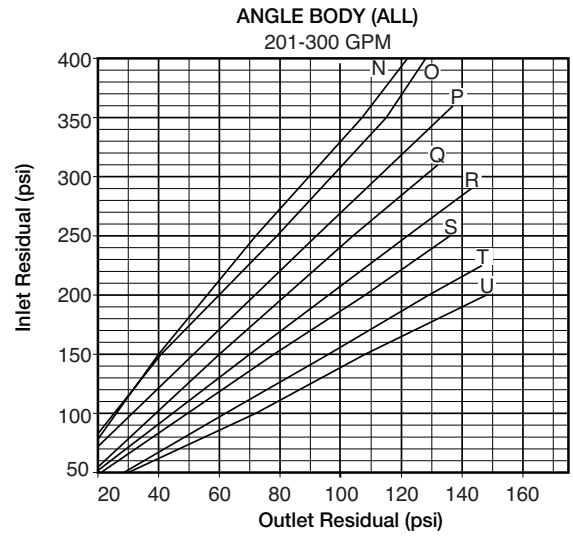
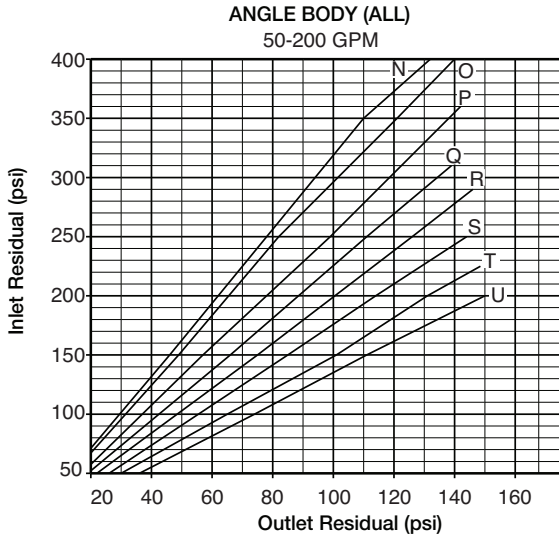
ZW4004GSS

Dimensions & Weights (do not include pkg.)

MODEL	DIMENSIONS (approximate)													
	A OPEN		B		C		D		E		F		WEIGHT	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs	kg
ZW4004SS	12 7/8	327	6 1/4	159	2 3/4	70	3 3/16	92	3 5/8	92	5 1/2	140	21	9.5
ZW4004ILSS	13 1/2	343	6 1/4	159	2 3/8	60	7 1/2	191	11	280	5 1/2	140	25	11.5
ZW4004GSS	13 5/16	338	6 1/4	159	3 3/16	81	3 3/16	81	n/a	n/a	5 1/2	140	20	9
ZW4004ILGSS	13 1/2	343	6 1/4	159	2 3/8	60	8 3/4	222	n/a	n/a	5 1/2	140	25	11.5

Residual Pressure Charts

For Pressure-Tru® 2 1/2" Models: ZW4000, ZW4000G, ZW4004 & ZW4004G



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.

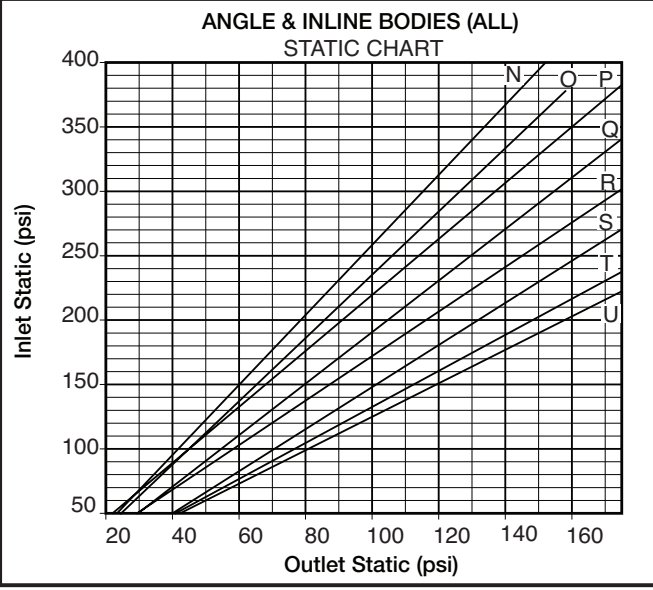
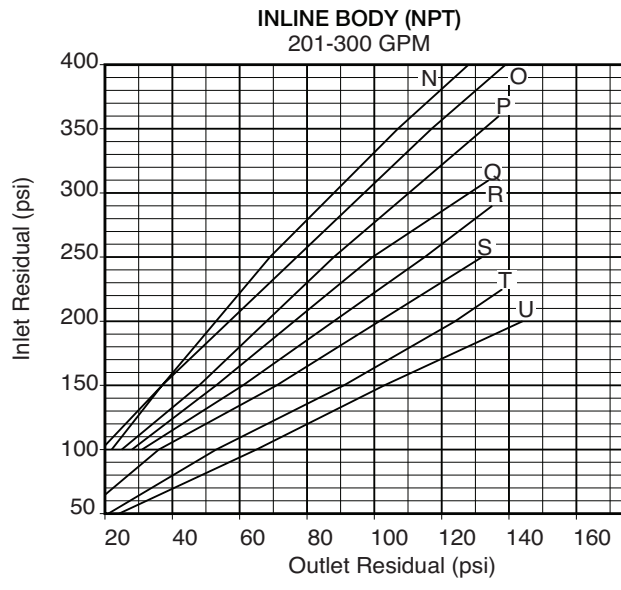
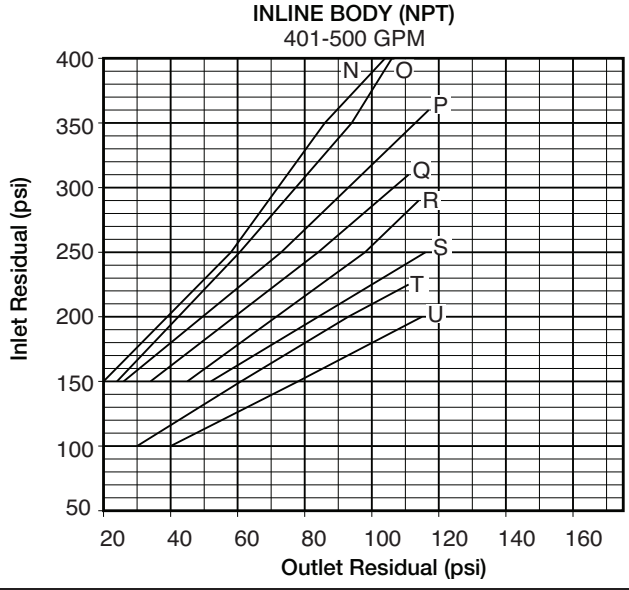
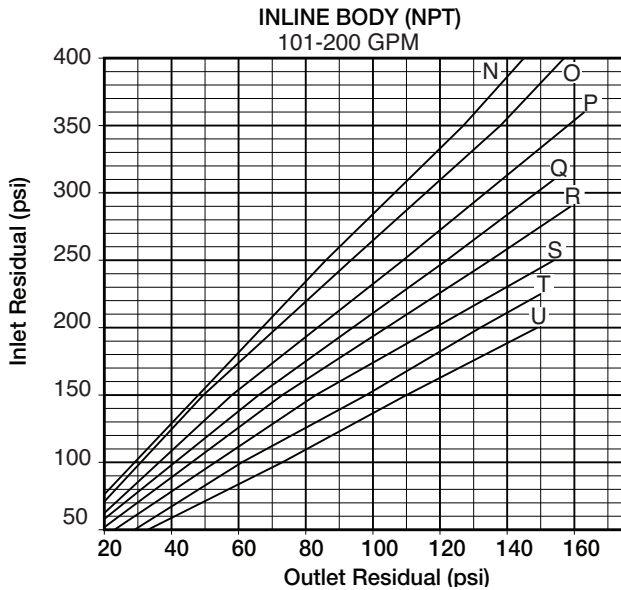
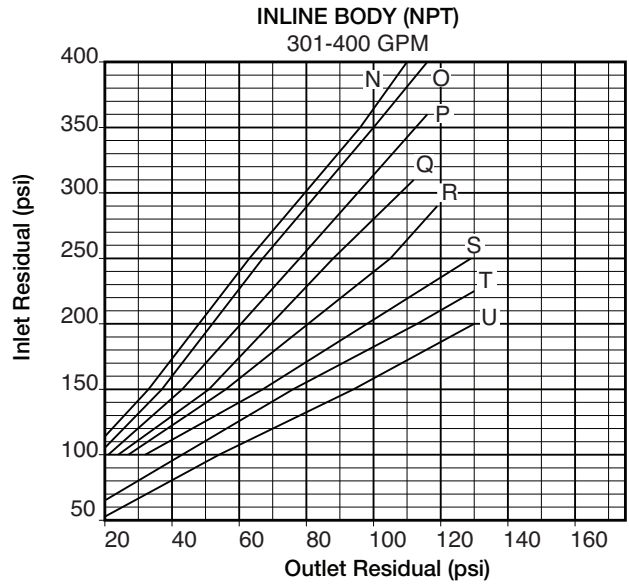
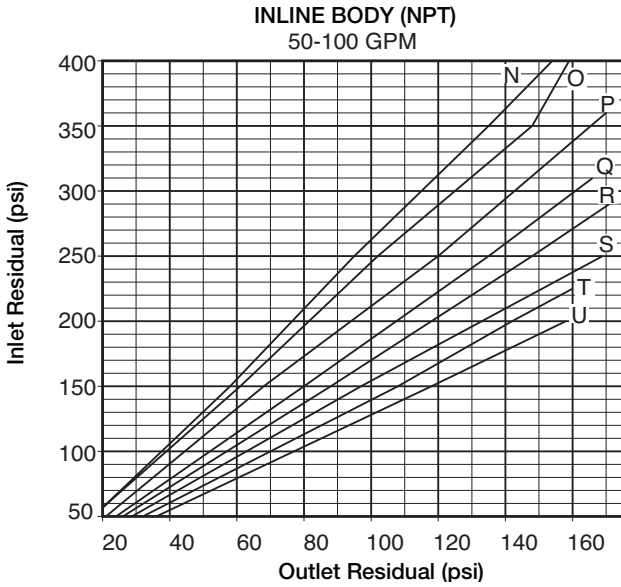
Maximum Rated Inlet Pressure

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 psi (kpa)	
N	400	(2750)
O	400	(2750)
P	360	(2475)
Q	310	(2125)
R	290	(2000)
S	250	(1725)
T	225	(1550)
U	200	(1375)

Residual Pressure Charts

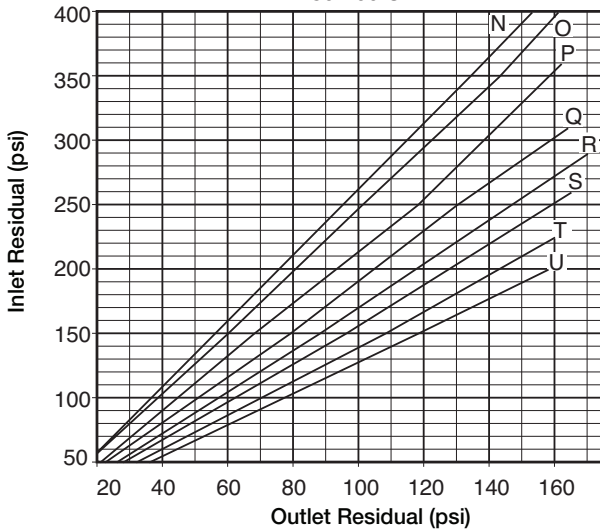
For Pressure-Tru® 2 1/2" Models: ZW4000IL & ZW4004IL



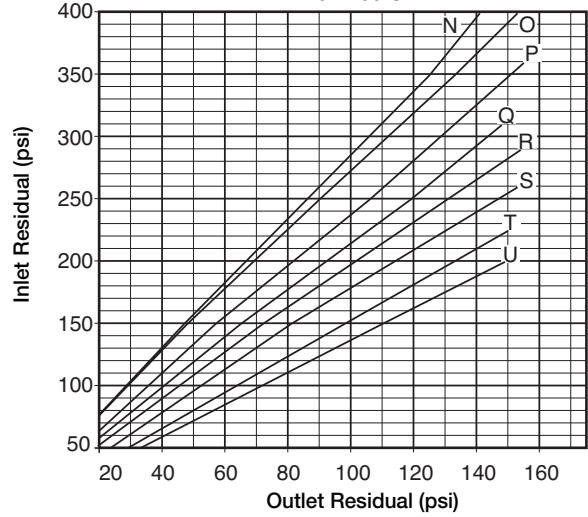
Residual Pressure Charts

For Pressure-Tru® 2 1/2" Models: ZW4000ILG & ZW4004ILG

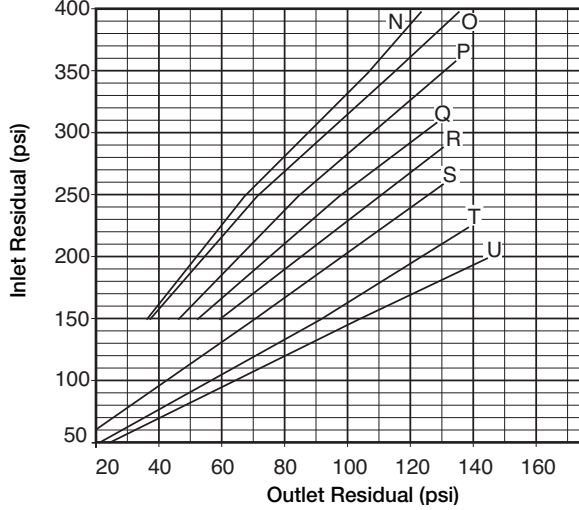
INLINE BODY (GROOVED)
50-100 GPM



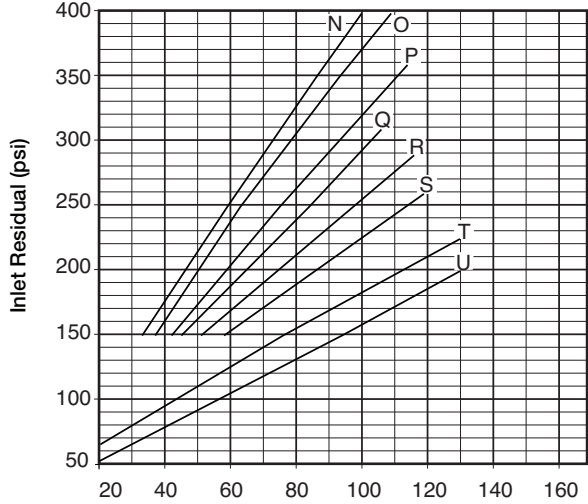
INLINE BODY (GROOVED)
101-200 GPM



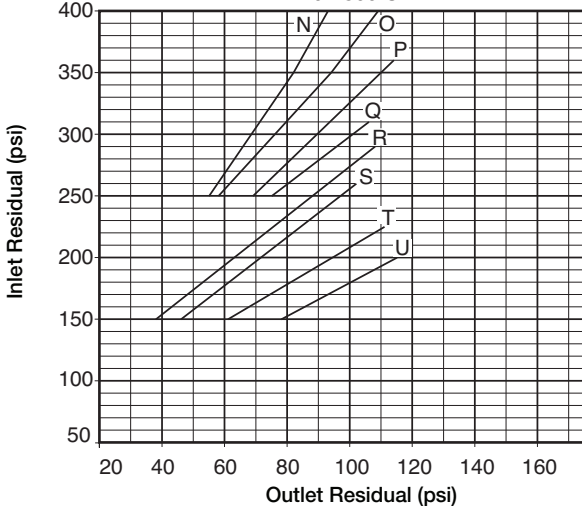
INLINE BODY (GROOVED)
201-300 GPM



INLINE BODY (GROOVED)
301-400 GPM



INLINE BODY (GROOVED)
401-500 GPM



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 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.



Model ZW4100

Pressure-Tru™ Fire Hose Valve

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

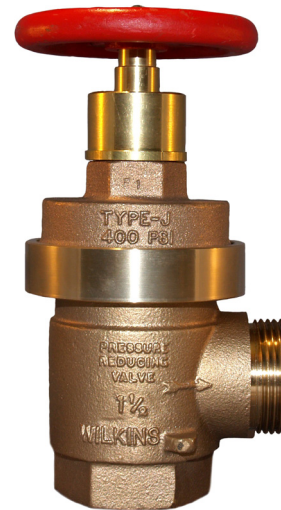
- UL® Listed
- C-UL® Listed

Materials

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

Features

Sizes: 1 1/2"
 Maximum inlet pressure 400 psi
 Inlet connection:
 FNPT ANSI B1.20.1
 Grooved AWWA C606
 Outlet connection: Male Hose (NH) NFFPA 1963
 Factory Set

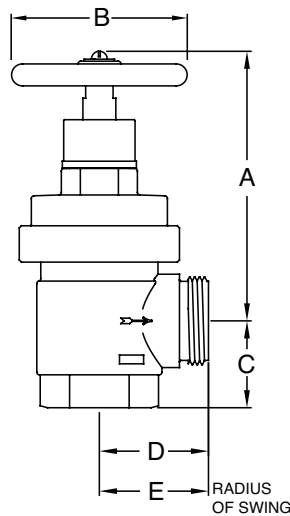


ZW4100

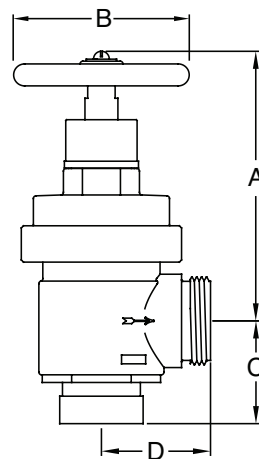
Options

(Suffixes can be combined)

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



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



Model ZW4104

Pressure-Tru™ Automatic Fire Control Valve

Application

The Pressure-Tru™ ZW4104 Series Pressure Reducing Valve is listed as a floor control valve, an indicating valve, and a check valve in automatic sprinkler systems as well as a standpipe valve for CLASSII systems. Regulates pressure under both flow and no-flow conditions.

Standards Compliance

- UL® Listed
- C-UL® Listed
- SS option - California State Fire Marshall Listed

Material

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

Features

Sizes: 1 1/2"
 Maximum inlet pressure 400 psi
 End connections:
 FNPT ANSI B1.20.1
 Grooved AWWA C606
 Factory Set

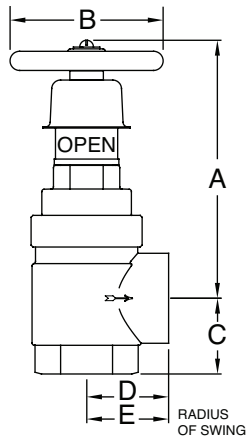


ZW4104

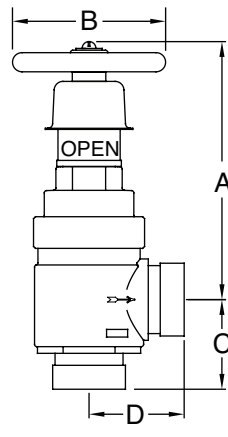
Options

(Suffixes can be combined)

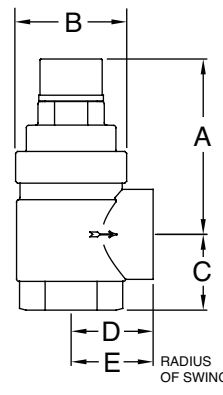
- ZW4104 - angle type valve
- G - with grooved inlet and outlet connections
- SS - with integral supervisory switch, contact rating 3 amps @ 125 VAC and tamper resistant cover
- MSA - with monitor switch adapter
- CAP - with capped bonnet, no handwheel assembly
- CH - with rough chrome finish



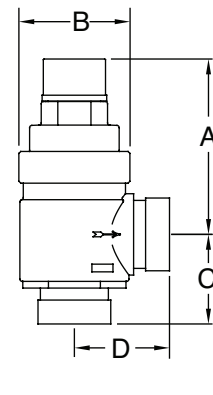
ZW4104



ZW4104G



ZW4104CAP



ZW4104GCAP

Dimensions & Weights (do not include pkg.)

MODEL	DIMENSIONS (approximate)												WEIGHT	
	A OPEN		A CLOSED		B		C		D		E			
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs	kg
ZW4104	6 3/4	171	6 1/8	155	4	101	2	51	2 3/16	55	2 3/16	55	9	4
ZW4104G	6 3/4	171	6 1/8	155	4	101	2 3/8	60	2 1/2	63	n/a	n/a	9	4
ZW4104CAP	4 5/8	117	n/a	n/a	3 3/4	95	2	51	2 3/16	55	2 3/16	55	8	3.5
ZW4104GCAP	4 5/8	117	n/a	n/a	3 3/4	95	2 3/8	60	2 1/2	63	n/a	n/a	8	3.5



Model ZW4104SS

Pressure-Tru™ Automatic Fire Control Valve

Application

The Pressure-Tru™ ZW4104SS Series Pressure Reducing Valve is listed as a floor control valve, an indicating valve, and a check valve in automatic sprinkler systems as well as a standpipe valve for CLASS II systems. Regulates pressure under both flow and no-flow conditions. The valve has a listed supervisory switch built in. Suitable for indoor / outdoor use. Tamper resistant housing can be rotated for easy wiring switch rated 3 amps @ 125 VAC. Normally open contacts are standard.

Standards Compliance

- UL® Listed
- C-UL® Listed
- California State Fire Marshall Listed

Features

Sizes: 1 1/2"

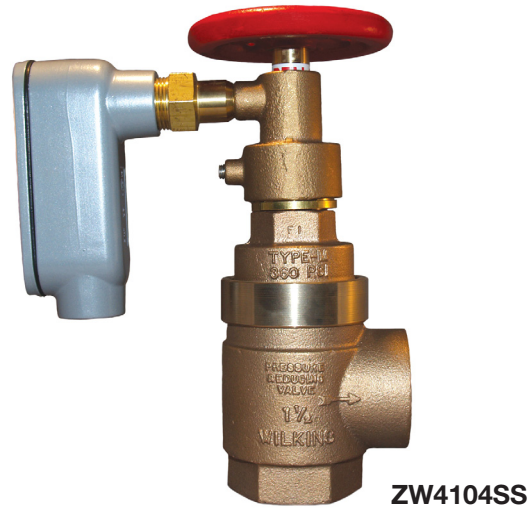
Maximum inlet pressure 400 psi

End connections
 FNPT ANSI B1.20.1
 Grooved AWWA C606

Factory Set

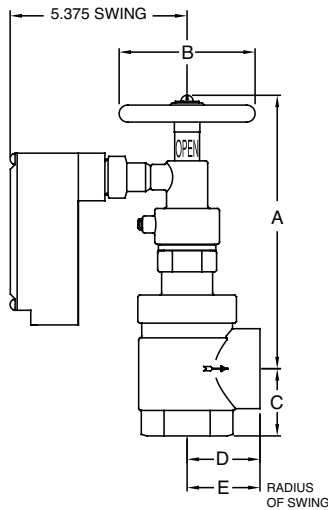
Material

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

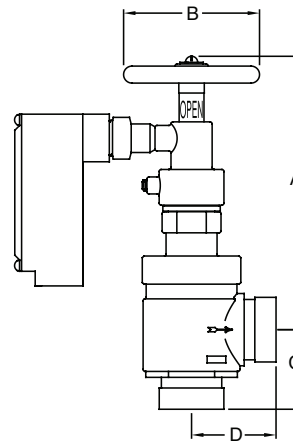


Options

- (Suffixes can be combined)
- ZW4104SS - angle type valve
- G - with grooved inlet and outlet connections
- CH - with rough chrome finish



ZW4104SS



ZW4104GSS

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		
ZW4104SS	8	203	7 3/8	187	4	101	2	51	2 3/16	55	2 3/16	55	11	5
ZW4104GSS	8	203	7 3/8	187	4	101	2 3/8	60	2 1/2	63	n/a	n/a	11	5