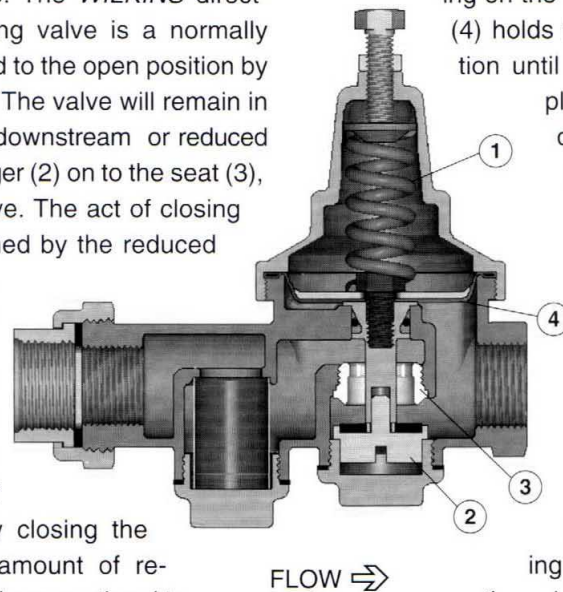


How Water Pressure Regulators Operate

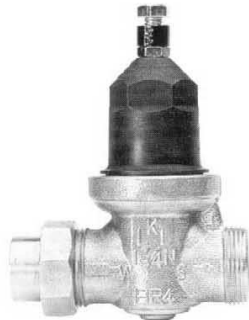
A pressure regulator is a pressure reducing valve designed to reduce high inlet pressure to a lower outlet pressure. The *WILKINS* direct-acting pressure reducing valve is a normally open valve that is biased to the open position by a pre-loaded spring (1). The valve will remain in the open position until downstream or reduced pressure forces the plunger (2) on to the seat (3), thereby closing the valve. The act of closing the valve is accomplished by the reduced pressure water pushing on the wetted side of the diaphragm (4). The reduced pressure water exerts a force on the diaphragm (4) in a direction opposite of the spring (1), thereby closing the valve. Therefore, the amount of reduced pressure is directly proportional to



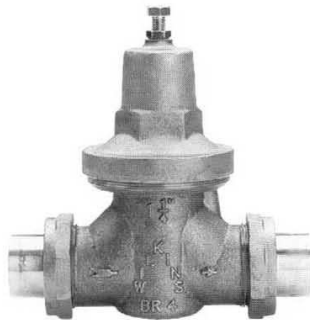
the pre-loaded spring (1). When the valve is pressurized, the reduced pressure water pushing on the wetted side of the diaphragm (4) holds the valve in the closed position until a demand is placed on the plumbing system. As soon as demand occurs, the amount of reduced pressure water pushing on the wetted side of the diaphragm (4) decreases, allowing the spring (1) to bias the valve open in order to satisfy the demand placed on the plumbing system. The valve will continue to modulate in the open position until the demand placed on the plumbing system ceases. At that point, the valve will again close.

Regulators

1/2" Thru 2"



MODEL BR4
(1/2"-1")



MODEL BR4DU SHOWN
(1 1/4"-2")

FEATURES

- ❑ Sizes: 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"
- ❑ Pressure rated 400 psi
- ❑ Spring range 15 to 150 psi (sizes 1/2"-1"); spring range 15 to 75 psi (sizes 1 1/4"-2"); factory set at 50 psi
- ❑ Maximum temperature 180°F
- ❑ Single union with FNPT tailpiece standard, inlet and outlet both male threaded for union on either or both sides
- ❑ Sizes 1/2"-1", all bronze body and composite bell housing; sizes 1 1/4"-2", all bronze body and bell housing
- ❑ Replaceable acetal cartridge with integral stainless steel strainer
- ❑ Built-in bypass prevents buildup of excessive system pressure caused by thermal expansion
- ❑ Removable spacer limits adjustment range to 80 psi (sizes 1/2"-1")
- ❑ Nylon reinforced Buna-N diaphragm
- ❑ Balanced piston design
- ❑ May be installed in any position
- ❑ All internal parts corrosion-resistant and included in a drop-in cartridge
- ❑ Short lay length makes for easy retrofit
- ❑ No special tools required
- ❑ Serviceable in-line
- ❑ Available tapped and plugged for gauge (optional)
- ❑ Available tapped with gauge (optional)
- ❑ Available with BSP threads (optional)

OPTIONS

(Some Options May Be Combined)

Model BR4C	Same as BR4 except union end connection standard in female copper sweat.
Model BR4DU	Same as BR4 except supplied with two FNPT tailpieces and union nuts.
Model BR4DUC	Same as BR4 except supplied with two female copper sweat tailpieces and two union nuts.
Model BR4DULU	Same as BR4 less tailpieces and union nuts
Model BR4SC	Same as BR4 except sealed cage bell and stainless steel adjusting screw. For below-ground applications. Recommended for indoor applications.
Model BR4PEX	Same as BR4 except the union end supplied with male barb connection tailpiece for cross-linked polyethylene (PEX) tubing.
Model BR4DUPEX	Same as BR4DU except supplied with two male barb connection tailpieces for cross-linked polyethylene (PEX) tubing.

ACCESSORIES

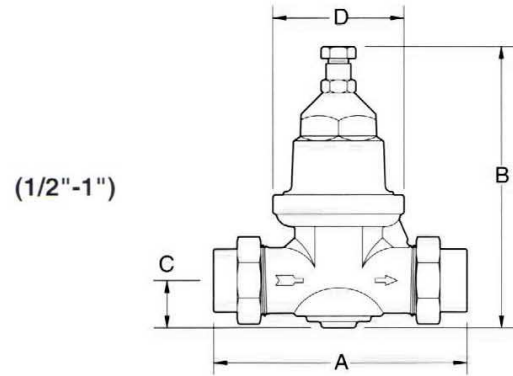
Model BR4DUSPC	Special plastic spacer nipple for use with 1/2", 3/4" and 1 1/4" BR4 double union regulators.
Model 70DUSPC	Special spacer nipple for use with 1" BR4 double union regulators.
Model SCR	Special in-line strainer screen for use with BR4DUSPC.

BR4 SERIES

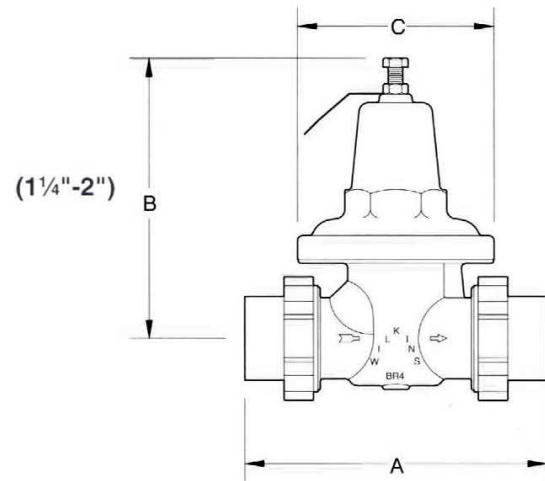
1/2" Thru 2"

DIMENSIONS & WEIGHTS (DO NOT INCLUDE PACKAGING)

SIZE		CONNECTIONS	DIMENSIONS (approximate)								WEIGHT	
in.	mm		A		B		C		D		lbs.	kg.
1/2	15	SINGLE UNION	4 3/8	111	6 1/4	159	1 1/8	29	2 1/2	64	3	1.5
1/2	15	LESS UNION	3 1/2	89	6 1/4	159	1 1/8	29	2 1/2	64	3	1.5
1/2	15	DOUBLE UNION	5 1/4	133	6 1/4	159	1 1/8	29	2 1/2	64	3	1.5
3/4	20	SINGLE UNION	4 7/16	113	6 1/4	159	1 1/8	29	2 1/2	64	3	1.5
3/4	20	LESS UNION	3 1/2	89	6 1/4	159	1 1/8	29	2 1/2	64	3	1.5
3/4	20	DOUBLE UNION	5 3/8	137	6 1/4	159	1 1/8	29	2 1/2	64	3	1.5
1	25	SINGLE UNION	4 15/16	125	7 3/4	197	1 3/16	30	3	76	4	2.0
1	25	LESS UNION	4	102	7 3/4	197	1 3/16	30	3	76	4	2.0
1	25	DOUBLE UNION	5 15/16	151	7 3/4	197	1 3/16	30	3	76	4	2.0



SIZE		CONNECTIONS	DIMENSIONS (approximate)						WEIGHT	
in.	mm		A		B		C		lbs.	kg.
1 1/4	32	SINGLE UNION	6	152	6 1/2	165	3 7/8	98	7	3.0
1 1/4	32	LESS UNION	5	127	6 1/2	165	3 7/8	98	6	2.5
1 1/4	32	DOUBLE UNION	7 1/2	191	6 1/2	165	3 7/8	98	8	3.5
1 1/2	40	SINGLE UNION	7	178	8	203	5	127	11	5.0
1 1/2	40	LESS UNION	5 13/16	148	8	203	5	127	10	4.5
1 1/2	40	DOUBLE UNION	8	203	8	203	5	127	12	5.5
2	50	SINGLE UNION	7	178	8	203	5	127	13	6.0
2	50	LESS UNION	5 13/16	148	8	203	5	127	11	5.0
2	50	DOUBLE UNION	8 5/16	211	8	203	5	127	14	6.5



FLOW CHARACTERISTICS

