ULLETIN 5101

REGULATORS BALANCED ZERO

MODEL: 5101 - BZR

Revision:

DESCRIPTION

Balanced Zero Regulators feature a rugged, large diaphragm actuated valve assembly, sensitively balanced at near zero pressure. Gas flow is initiated by a very small pressure differential across the main diaphragm. Gas supply is precisely modulated on system demand by negative or positive signals from suction mixers or controlled pressure from an external source.

Sensitive and accurate, the BZR regulator delivers gas at a precise pressure, even with slight inlet pressure variations. The patented regulator design assures highest accuracy over full flow range: With no friction between sensitively counterbalanced parts, fast, positive response is assured.

The BZR regulator assures dependable, precise gas flow control on all types of combustion systems including proportioning premixers, nozzle mixers and mixing tees at positive or negative combustion chamber pressures.



Model Number	Pipe Size		SCFH Gas Flow @ 4.0" W.C. Pressure Drop					
	Inlet	Outlet	MFD.	NAT.	AIR	L.P.		
			0.4 Sp. Gr.	0.6 Sp. Gr.	1.0 Sp. Gr.	1.5 Sp. Gr.		
6 - BZR	3/4"	3/4"	790	650	500	410		
8 - BZR	1"	1"	1,580	1,290	1,000	820		
12 - BZR	1-1/2"	1-1/2"	3,160	2,580	2,000	1,640		
16 - BZR	2"	2"	5,530	4,520	3,500	2,860		
20 - BZR	2-1/2"	2-1/2"	7,900	6,450	5,000	4,100		
24 - BZR	3"	3"	12,600	10,300	8,000	6,500		
32 - BZR	4"	4"	22,100	18,100	14,000	11,400		





FEATURES

Accuracy:

Low - Flow: ± 0.1 " W.C. Full - Flow: ± 0.3 " W.C.

- Turndown up to 200:1
- Operating temperatures to 150 °F
- All units factory tested and sealed before shipment
- Maximum inlet pressure: 2.0 psig
- Maximum pressure differential: 14.0" W.C.
- Sensitivity Responds to signal pressure differential as low as 0.04" W.C.

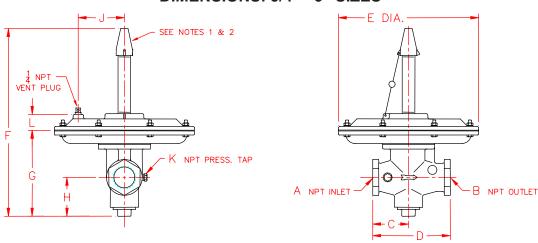
CAUTION: Operation of combustion equipment can be hazardous resulting in bodily injury or equipment damage. Each burner should be supervised by a combustion safeguard and only qualified personnel should install, make system adjustments and perform any required service.



REGULATORS BALANCED ZERO

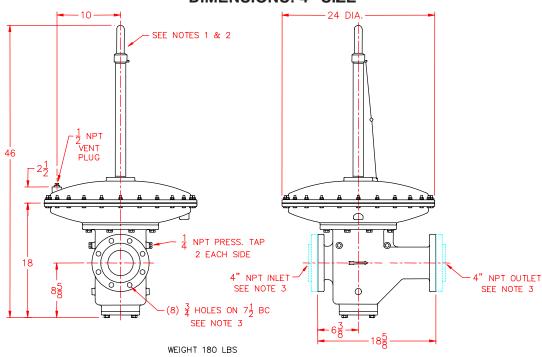
BULLETIN 5101 PAGE NO. 2

DIMENSIONS: 3/4" - 3" SIZES



Model Number	Α	В	C	D	Е	F	G	H	7	K	L	Weight Lbs.
6 - BZR	3/4	3/4	2-1/2	5	8-1/4	11-1/4	4-7/8	2	2-3/4	1/8	1-1/4	6.5
8 - BZR	1	1	2-3/8	4-3/4	9-3/4	11-3/4	4-3/4	2	3-3/8	1/8	1-1/4	8.5
12 - BZR	1-1/2	1-1/2	3	6-1/2	11-3/4	15-3/4	7-1/4	3-1/4	3-7/8	1/4	1-3/8	15.5
16 - BZR	2	2	3-1/2	7-1/2	11-3/4	16-1/8	8-1/8	3-7/8	3-7/8	1/4	1-3/8	20.0
20 - BZR	2-1/2	2-1/2	4	8-3/4	14	17-5/8	8-3/4	3-5/8	3-5/8	1/4	1-7/8	50.0
24 - BZR	3	3	5-3/4	11-1/2	14	20-3/8	10-5/8	4-5/8	3-5/8	1/4	1-7/8	60.5

DIMENSIONS: 4" SIZE



NOTES:

- 1. Spring housing must be perpendicular to pipe run in an upright position.
- 2. Gas pipe run must be horizontal and level.

- 3. Designed to accept standard 4" ANSI flanges.
- 4. All dimensions are in inches.

ORDERING INFORMATION

- 1. Specify Inlet and Outlet Pressure.
- 2. Type of Gas, Flow, Specific Gravity and Temperature.
- 3. Specify Model Number and Quantity.
- 4. Shipping Instructions.