# SULLETIN 5112

# REGULATORS BALANCED ZERO 500 °F SERVICE

MODEL: 5112 - BZR - 500

Revision: 0

### **DESCRIPTION**

BZR-500 Series Balanced Zero Regulators are used for precise control of heated gases or for equipment locations subjected to high ambient temperatures. They are designed for continuous operation up to  $500\,^{\circ}\text{F}$  and to resist corrosion from high sulphur or other corrosive gases. The special high temperature construction does not sacrifice performance.

The BZR-500 series regulators duplicate the precise control characteristics of the standard BZR Regulators. They automatically adjust valve position to hold a desired precise outlet pressure. Slight variations in inlet pressure do not affect the performance.

For installation, see Bulletin 5101 Installation.



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.			
8 - BZR - 500	1"	1"	1,580	1,290	1,000	820			
12 - BZR - 500	1-1/2"	1-1/2"	3,160	2,580	2,000	1,640			
20 - BZR - 500	2-1/2"	2-1/2"	7,900	6,450	5,000	4,100			
24 - BZR - 500	3"	3"	12,600	10,300	8,000	6,500			
32 - BZR - 500	4"	4"	22,100	18,100	14,000	11,400			



#### **FEATURES**

Accuracy:

Low - Flow  $\pm$  0.1" W.C. Full - Flow  $\pm$  0.3" W.C.

■ Turndown up to 200:1

Continuous operation to 500 °F

• For use with High Sulphur Gases

All units factory tested and sealed before shipment

Maximum inlet pressure: 5.0 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.

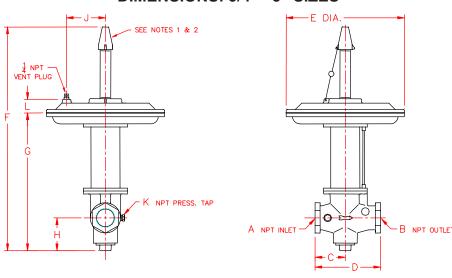


NOTICE: PYRONICS practices a policy of continuous improvement in the design of its products. It reserves the right to change the specifications at any time without prior notice.

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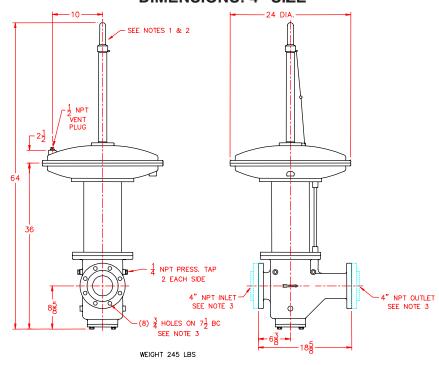
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## **DIMENSIONS: 3/4" - 3" SIZES**



Model Number	Α	В	С	D	Е	F	G	Н	J	K	L	Weight Lbs.
8 - BZR - 500	1	1	2-3/8	4-3/4	9-3/4	22-7/8	15-7/8	2	3-3/8	1/8	1-1/4	12.0
12 - BZR - 500	1-1/2	1-1/2	3	6-1/2	11-3/4	33-1/4	18-3/8	3-1/4	3-7/8	1/4	1-3/8	25.5
20 - BZR - 500	2-1/2	2-1/2	4	8-3/4	14	36-1/2	21-1/4	3-5/8	3-5/8	1/4	1-7/8	66.5
24 - BZR - 500	3	3	5-3/4	11-1/2	14	38-3/8	23	4-5/8	3-5/8	1/4	1-7/8	77.5

## **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.