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# MAXITROL

# **Gas Appliance Regulators 210 Series**

210D, 210E, 210G & 210J\*

# SPECIFICATIONS

**Note:** All Maxitrol gas appliance regulators should be installed and operated in accordance with Maxitrol's "Safety Warning" Bulletin.

### \* Not CSA Approved

# DESCRIPTION

The 210 series is a lock-up type regulator and complies with codes using this specification.

The 210 series has been designed for maximum control function in an easy to use package. The series is intended for use with gas-fired boilers, steam generators, industrial furnaces, ovens, and similar high demand equipment.

The balanced valve design eliminates the inlet pressure effect acting on the valve. Regulating stability is improved and hunting tendencies reduced by the use of dampening mechanisms in both the breather outlet and sensing tube. You get precise regulation over a broad range of pressures and flow rates with the 210 series, including a "zero governor" application.

Housings are of high strength aluminum alloy and are reinforced with webs for maximum strength. The 210J model is of cast iron and steel construction with 125 pound flange connections. Internal parts are cast or machined from corrosion resistant metals or electroplated.

Diaphragms are of the finest synthetic coated fabrics.

When selecting pipe size, make sure regulator is not more than one size smaller or larger than manifold pipe size. Gas flow must be oriented to arrow on the bottom casting. At exposures to maximum emergency levels, the regulator will suffer no internal damage, but it may provide accurate regulation. See Maxitrol's "Spring Chart" for complete selection of spring ranges on all models. Balanced Valve Design

Convenient tap locations are provided for downstream sensing, cross connections, and differential control. Four locations can be tapped and plugged for measuring pressure.

The 210D, E, and G may be ordered with remote sensing. The internal sensing tube is omitted and external sensing taps are provided. Add suffix letter "R" to model numbers when ordering.

Vertical vent tapped - 3/8" NPT on 210D, 1/2" on 210E, 3/4" on 210G and J.





## DIMENSIONS AND SPECIFICATIONS





Illustration no. 1

#### **DIMENSIONS** - in inches

Model and		Swing	Call Outs					
Illustration	Number	Radius	Α	В	С	D		
210D	1	5 <sup>7/16</sup>	9	7	6	2 <sup>3/8</sup>		
210E	1	8 5/16	<b>11</b> <sup>1/4</sup>	9 <sup>1/8</sup>	8	2 15/16		
210G	1	11 <sup>7/8</sup>	16 1/2	13 <sup>1/2</sup>	10 3/8	4 <sup>9/16</sup>		
210J	2	18	24 1/4	18	13 <sup>3/4</sup>	5 <sup>7/16</sup>		

Illustration no. 2

**NOTE:** Dimensions are to be used only as an aid in designing clearance for the regulator. Actual production dimensions may vary somewhat from those shown.

#### **SPRING SELECTION CHART - in inches**

Model a Sprir	nd Standard ng Range	Other Springs Available									
210D	3.0" - 6.0"	1.0 - 3.5	2.0 - 5.0	3.0 - 8.0	4.0 - 8.0	4.0 - 8.0	4.0 - 12	5.0 - 12	10 - 22	15 - 30	20 - 42
210E	3.0" - 6.0"	1.0 - 3.5	2.0 - 5.0	3.0 - 8.0	4.0 - 8.0	4.0 - 8.0	4.0 - 12	5.0 - 12	10 - 22	15 - 30	20 - 42
210G	3.0" - 6.0"	1.0 - 3.5	2.0 - 5.0	3.0 - 8.0	4.0 - 8.0	4.0 - 8.0	4.0 - 12	5.0 - 12	10 - 22	15 - 30	20 - 42
210J	3.0" - 6.0"		2.0 - 5.0	3.0 - 8.0		4.0 - 8.0	4.0 - 12		10 - 22	15 - 30	20 - 42

#### CAPACITIES - expressed in ft<sup>3</sup>/h@0.64 sp gr gas

Model Number and Pipe Size		0.1	0.3	0.5	1.0	3.0	5.0	7.0	1/2 psi	3/4 psi	1 psi	2 psi
210D	1 x 1 1 <sup>1/4</sup> x 1 <sup>1/4</sup> 1 <sup>1/2</sup> x 1 <sup>1/2</sup>				900 1100 1200	1600 1900 2100	2000 2500 2700	2400 2900 3200	3300 4100 4500	4100 5000 5500	4750 5850 6350	5800 7150 7750
210E	1 <sup>1/2</sup> x 1 <sup>1/2</sup> 2 x 2		1050 1210	1350 1560	1915 2210	3315 3825	4280 4940	5065 5845	7125 8225	8725 10070	10075 11630	12340 14245
210G	2 <sup>1/2</sup> x 2 <sup>1/2</sup> 3 x 3	1410 1555	2450 2695	3160 3475	4470 4920	7740 8520	9995 11000	11825 13020	16635 18310	20375 22425	23525 25890	28810 31710
210J	4 x 4	2700	4700	6000	8600	15000	19000	23000	32000	40000	45000	55700

