



## **RegO Regulator Selection**

In order to properly size the RegO Regulator, find the total load of the installation. The total load is calculated by adding up the input ratings (BTU or CFH) of all appliances in the installation. Input ratings may be obtained from the nameplates on the appliances or from the manufacturers' literature.

Determine the type of regulation needed referring to the chart below.

Type of System	Maximum Load	Suggested Regulator		
First Stage in a Two	1,500,000	LV3403TR		
First Stage in a Two Stage System	2,500,000	LV4403SR Series LV4403TR Series		
	450,000	LV3403B Series		
	450,000	LV3403BR Series		
Second Stage in a	935,000	LV4403B Series		
Two Stage System	935,000	LV4403BD Series		
	1,600,000	LV5503B4/B6		
	2,300,000	LV5503B8		
Second Stage in a 2	1,000,000	LV4403Y4/Y46R		
PSIG System	2,200,000	LV5503Y6/Y8		
Integral Twin Stage	450,000	LV404B34/39 Series		
integral Twin Stage	525,000	LV404B4/B9 Series		
Integral Twin Stage	800,000	LV404Y9		
2 PSIG Delivery	650,000	LV404Y39		
Automatic	400,000	7525B34 Series		
Changeover	450,000	7525B4 Series		

<sup>\*</sup> See catalog page for inlet and delivery specifications

Now determine which regulator in the Series would be most suitable. Turn to the individual product pages and refer to the Performance Curves. Check the performance of the regulator with your actual load conditions at the minimum LP-Gas inlet pressure for the regulator. Use the pressure corresponding to your lowest winter temperatures shown in the chart below or refer to the delivery pressure of your first stage regulator.

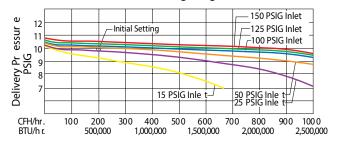
Temperature		Approx. Pressure (PSIG)		Temperature		Approx. Pressure (PSIG)	
°F	°C	Propane	Butane	°F	°C	Propane	Butane
-40	-40	3.6		40	4	72	3.0
-30	-34	8		50	10	86	6.9
-20	-29	13.5		60	16	102	12
-10	-23	23.3		70	21	127	17
0	-18	28		80	27	140	23
10	-12	37		90	32	165	29
20	-7	47		100	38	196	36
30	-1	58		110	43	220	45

## **Example for a First Stage Regulator**

- 1. Assume a load of 500,000 BTU's per hour.
- Assume a minimum delivery pressure of 9.5 PSIG.
- Assume a minimum tank pressure of 15 PSIG.

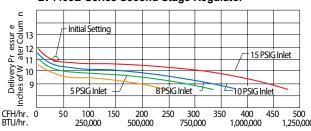
- For these conditions, refer to chart for the LV4403TR Series, First Stage Regulator, shown below.
- Find the line on the chart corresponding to the lowest anticipated winter tank pressure (note that each performance line corresponds to and is marked with a different inlet pressure in PSIG).
- 6. Draw a vertical line upward from the point of assumed load (500,000 BTU's per hour) to intersect with the line corresponding to the lowest tank pressure.
- 7. Read horizontally from the intersection of these lines to the delivery pressure at the left side of the chart. In this example the delivery pressure will be 9.2 PSIG. Since the delivery pressure will be 9.2 PSIG at the maximum load conditions and lowest anticipated tank pressure, the regulator will be sized properly for the demand.

## **Example for a Second Stage Regulator** LV4403TR Series First Stage Regulator



- 1. Assume load of 250,000 BTU's per hour.
- 2. Assume a minimum delivery pressure of 10" w.c.
- Assume a minimum inlet pressure of 10 PSIG.
- For these conditions, refer to chart for the LV4403B Series, Second Stage Regulator, shown below.
- 5. Find the line on the chart corresponding to the anticipated inlet pressure.
- 6. Draw a vertical line upward from the point of assumed load (250,000 BTU's per hour) to intersect with the line corresponding to the lowest inlet pressure.
- 7. Read horizontally from the intersection of these lines to the delivery pressure at the left side of the chart. In this example the delivery pressure will read 10.1" w.c. Since the delivery pressure will be 10.1" w.c. at the maximum load condition and lowest anticipated inlet pressure, the regulator is sized properly for the

## LV4403B Series Second Stage Regulator









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