



Gas Essentials^{INC}

Natural and Propane Gas Regulation, Measurement and Controls

Distributed By



Commercial & Industrial Propane Regulators and Meters

Master Distributor for



P200 Pressure Regulator

Features

- Minimize Sudden Downstream Load Change
- Wide Pressure Ranges
- P202 has internal relief valve for overpressure protection

The P200 Series Pressure Regulator is a manual self-operating, spring loaded, adjustable regulator.

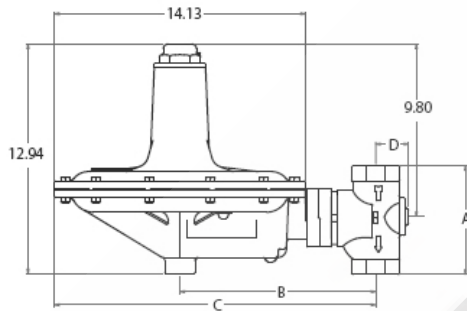
The P200 Series is used in applications where pressure reduction is required.

The P200 will reduce the risk of “shock” from abrupt changes in downstream conditions. This can help prevent safety equipment from shutting an operation down.

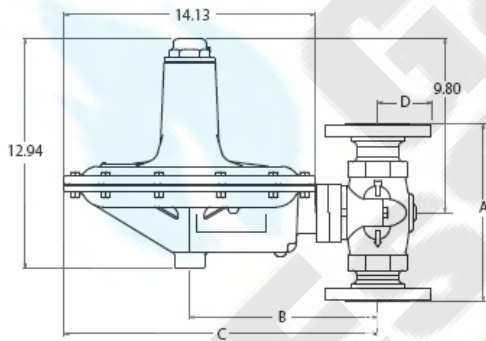


- Valve Body Size: 2” NPT, 2” 150# RF Flange
- Vent Size: 1” NPT
- Temperature Range: -20°F to 200°F
- Approximate Weight: 26 lbs.
- 125 PSI Maximum Inlet Pressure

P200 Standard



P200 Flanged



Dimensions

Body Size	A		B	C	D		
	Inches	NPT			125 FF Flange*	NPT	125 FF Flange*
1.25	6.13		11.03	18.09	1.85		
1.5	6.13		11.03	18.09	1.85		
2	6.13	10	10.59	17.66	2.15	3	3

Maximum Pressures			
Orifice Inches	Versions	Pressure Range "WC or PSIG	Maximum Inlet Pressure PSIG
1/4"			125
3/8"			125
1/4"			100
3/4"			60
1"	O		25
	H		20
	K		30
1-3/16"	O		13
	H	1 - 2 PSIG	14
		1.5 - 3.25 PSIG	14
		2 - 5 PSIG	20
	K	2 - 5.5 PSIG	20
4 - 10 PSIG		25	

Outlet Spring Pressure Ranges				
Model	Spring Ranges		Spring Color	Part Number
	W.C. or PSI	Bar		
P201 and P202	2 - 4.5 W.C.	0.005 - 0.011	Br	655-697-002
	3.5 - 6.5 W.C.	0.009 - 0.016	Red	655-697-003
	5 - 9 W.C.	0.012 - 0.022	Black	655-697-004
	8.5 - 18 W.C.	0.021 - 0.045	White	655-697-005
	14 - 30 W.C.	0.035 - 0.075	Dark Green	655-697-006
P201H and P202H	1 - 2 PSI	0.069 - 0.138	Dark Blue	655-697-007
	1.5 3.25 PSI	0.103 - 0.224	Orange	655-697-008
	2 - 5 PSI	0.138 - 0.345	Yellow	655-697-009
P201K	2 - 5.5 PSI	0.138 - 0.379	Green	655-659-003
	4 - 10 PSI	0.276 - 0.689	Grey	655-697-010



Capacity Table- P200 Regulator

Propane Gas Capacities BTU/Hr (1.50 Specific Gravity)

CAPACITIES IN SCFH - 7" w.c. SET POINT (1" Droop)						
Inlet PSIG	Orifice Size, Inches					
	1/4"	3/8"	1/2"	3/4"	1"	1 3/16"
0.5				2,362,500	2,835,000	3,150,000
1	630,000	1,260,000	1,890,000	3,622,500	4,410,000	5,197,500
1.5	787,500	1,653,750	2,520,000	4,882,500	5,670,000	7,087,500
2	945,000	2,047,500	3,150,000	6,300,000	7,087,500	9,450,000
5	1,575,000	3,307,500	5,512,500	12,127,500	14,805,000	14,805,000
13	2,598,750	5,512,500	10,080,000	15,750,000	31,815,000	33,390,000
25	3,780,000	8,190,000	16,222,500	31,500,000	18,585,000	
60	7,008,750	14,175,000	18,900,000	32,602,500		

CAPACITIES IN SCFH - 14" w.c. SET POINT (2" Droop)						
Inlet PSIG	Orifice Size, Inches					
	1/4"	3/8"	1/2"	3/4"	1"	1 3/16"
1	708,750	1,102,500	1,732,500	2,362,500	2,677,500	4,252,500
1.5	866,250	1,338,750	1,890,000	2,992,500	4,252,500	5,670,000
2	945,000	1,575,000	2,992,500	4,410,000	5,985,000	5,985,000
5	1,653,750	2,756,250	4,410,000	6,300,000	8,347,500	16,695,000
13	2,756,250	5,827,500	8,977,500	22,680,000	28,350,000	29,137,500
25	4,095,000	8,977,500	16,065,000	28,350,000	40,005,000	
60	7,560,000	17,167,500	17,325,000	30,870,000		

CAPACITIES IN SCFH - 2 PSI SET POINT (2% Droop)						
Inlet PSIG	Orifice Size, Inches					
	1/4"	3/8"	1/2"	3/4"	1"	1 3/16"
5	1,575,000	3,386,250	4,331,250	7,875,000	9,765,000	12,442,500
10	2,441,250	4,803,750	7,875,000	13,545,000	20,081,250	21,735,000
15	2,992,500	6,615,000	11,340,000	17,325,000	18,506,250	34,177,500
20	3,622,500	8,032,500	14,490,000	22,365,000	25,200,000	
25	4,095,000	9,292,500	16,852,500	25,830,000	40,005,000	
30	4,725,000	10,395,000	19,057,500	31,027,500	43,942,500	
40	5,827,500	12,915,000	19,215,000	42,840,000		
45	6,457,500	14,175,000	23,940,000	42,840,000		
50	6,930,000	15,277,500	26,617,500	43,155,000		
60	8,032,500	17,797,500	32,760,000	43,155,000		

Capacity Table- P200 Regulator (continued)

Propane Gas Capacities BTU/Hr (1.50 Specific Gravity)

CAPACITIES IN SCFH - 5 PSI SET POINT (2% Droop)						
Inlet PSIG	Orifice Size, Inches					
	1/4"	3/8"	1/2"	3/4"	1"	1 3/16"
10	1,575,000	2,205,000	2,598,750	4,567,500	5,512,500	7,087,500
15	2,047,500	3,307,500	4,410,000	6,142,500	8,662,500	9,213,750
20	2,598,750	4,331,250	5,670,000	8,347,500	11,655,000	
25	3,228,750	5,355,000	6,930,000	10,710,000	11,655,000	
30	3,780,000	6,300,000	8,662,500	12,442,500	13,151,250	
40	4,882,500	8,505,000	11,340,000	14,647,500		
45	5,118,750	9,607,500	13,072,500	15,513,750		
50	6,063,750	10,552,500	14,805,000	16,773,750		
60	7,008,750	12,915,000	18,112,500	22,916,250		

CAPACITIES IN SCFH - 10 PSI SET POINT (2% Droop)						
Inlet PSIG	Orifice Size, Inches					
	1/4"	3/8"	1/2"	3/4"	1"	1 3/16"
15	708,750	866,250	1,338,750	2,047,500	2,441,250	2,913,750
20	708,750	1,575,000	1,732,500	2,756,250	3,465,000	3,780,000
25	866,250	1,968,750	2,520,000	3,622,500	4,252,500	5,591,250
30	1,260,000	2,126,250	2,835,000	4,410,000	4,410,000	
40	1,653,750	2,598,750	3,386,250	5,512,500		
45	2,126,250	2,992,500	4,095,000	5,827,500		
50	2,283,750	3,307,500	4,488,750	6,772,500		
60	2,520,000	3,622,500	4,882,500	6,930,000		

General Information

Information about LP-Gas*

	Propane	Butane
Formula	C ₃ H ₈	C ₄ H ₁₀
Boiling Point, °F.	-44	15
Specific Gravity of Gas (Air = 1.00)	1.50	2.01
Specific Gravity of Liquid (Water = 1.00)	0.504	0.582
Lbs. per Gallon of Liquid at 60° F.	4.20	4.81
BTU per Gallon of Gas at 60° F.	91502	102032
BTU per Lb. of Gas	21548	21221
BTU per Cu. Ft. of Gas at 60° F.	2488	3280
Cu. Ft. of Vapor (at 60° F) Gal.	36.38	31.26
Cu. Ft. of Vapor (at 60° F) Lb.	8.66	6.51
Latent Heat of Vaporization at Boiling Point BTU/Gal.	773	808
Combustion Data: Cu. Ft. Air Required to Burn 1 Cu. Ft. Gas	23.86	31.02
Flash Point, °F.	-156	N.A.
Ignition Temperature in Air, °F.	920-1120	900-1000
Maximum Flame Temperature in Air, °F.	3595	3615
Limits of Flammability Percentage of Gas in Air Mixture; at Lower Limit - % at Upper Limit - %	2.15 9.6	1.55 8.6
Octane Number (ISO - Octane = 100)	Over 100	92

* Commercial quality. Figures shown in this chart represent average values.

Vapor Pressures of LP-Gases*

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

* Conversion Formula: Degrees C. = (°F. - 32) x 5/9 • Degrees F. = 9/5 x °C. + 32

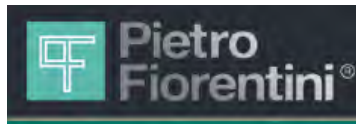
Comparison Chart

Itron	BelGas	Fisher
B42R/PGS6	P143	HSRL
B31R/PGS8	P143	S102
B34SR/PGS10	P202	S202
B34R/PGS12	P202	S202
B38R/PGS24	P202 or P133	
	P912	912
	P32	67C
	P37	64
	P627	627
	R627	627R
	P630	630
PGP12	P99	299/99
PGD1/2	P133/P99	133L/H
PGD11/22/33	P99/Dival	1098-EGR
	P289	289

*** Note – This is a guide only**



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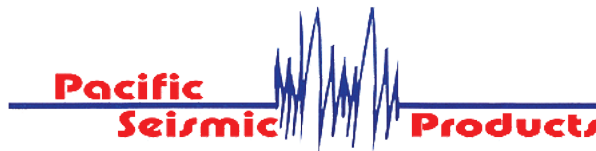
CSA 6.22a -2005 and ANSI Z21.80a Approved
Ventless Indoor Applications



Regulators for Natural & Propane Gas
High Pressure Regulators up to 5000 PSI
Filter Regulators & Gauges

MILLIKEN

Lubricated two way & three way Plug Valves
CSA/CGA Approved



Seismic "Earthquake" Valves
available from 3/4" to 8"

METERS

Diaphragm, Rotary, Turbine,
Flange Kits and Accessories

Manufacturer standard warranty applies. For a copy please contact us.