

1½", 2" and 2½" Model 121-12 Capacity in scfh of natural gas

(0.6 Specific Gravity – 14.65 psia – 60°F)

An outstanding feature of the 121 is large capacity. It has so much that at higher inlet pressure it is necessary to increase the size of the outlet piping.

This pipe size increase is indicated by the asterisks in the capacity tables below and on pages 4, 5, 6 and 7. The following note explains how to read this data from the tables:

NOTE: Each capacity figure immediately above the heavy horizontal lines is a maximum capacity for the outlet pipe size shown. Increasing the inlet pressure will not increase the capacity without also increasing the outlet pipe size as indicated.

For example: a 1½" Model 121-12 at 5" w.c. set-point has the following maximum capacities:

1. With 1½" size outlet piping 14,600 SCFH at 3 psi to 60 psi inlet pressure.
2. With 2" size outlet piping 37,000 SCFH at 15 psi to 60 psi inlet pressure.
3. With 3" size outlet piping 95,000 SCFH at 60 psi inlet pressure.

The designated increase in outlet pipe size must be made immediately downstream of the regulator outlet.

This **NOTE** applies to the asterisks in all capacity tables, pages 4, 5, 6 and 7.

Pipe Size	Inlet Pressure	Outlet Pressure							Regulator Size and Model	
		Set-Point 5" W.C.	Set-Point 7" W.C.	Set-Point 11" W.C.	Set-Point 18" W.C.	Set-Point 28" W.C.	Set-Point 2 psi.	Set-Point 3 psi.		
		Red Spring 1" w.c. Droop	Blue Spring 1" w.c. Droop	Green Spring 2" w.c. Droop	Orange Spring 2" w.c. Droop	Orange Spring 3" w.c. Droop	Black Spring ¼ psi. Droop	Cadmium ½ psi. Droop		
1½" *	8" w.c.	4000	3000	—	—	—	—	—	1½" Model 121-12	
	14" w.c.	4900	4500	3700	—	—	—	—		
	1 psi	7400	7000	6500	6000	—	—	—		
	2 psi	11500	11000	10300	9500	10000	—	—		
	3 psi	14600	14500	13750	12500	13000	10000	—		
2" *	5 psi	19500	19400	18500	17300	18000	16400	14000		
	10 psi	30000	30000	28000	27000	27500	25100	25500		
	15 psi	37000	37000	36200	35000	35700	34000	31500		
3" *	25 psi	50000	50000	49000	47400	48000	46000	45500		
	40 psi	68000	68000	67100	66000	66600	64200	63500		
	50 psi	80000	80000	79000	77700	78000	74900	76000		
	60 psi	95000	95000	93500	90000	92000	87000	86500		
2" *	8" w.c.	5000	4000	—	—	—	—	—		2" Model 121-12
	14" w.c.	8900	8000	6600	—	—	—	—		
	1 psi	13000	12500	12000	11000	—	—	—		
	2 psi	20500	20000	19400	17500	18000	—	—		
	3 psi	26300	26000	25000	23400	23800	19000	—		
3" *	5 psi	35000	35000	34500	33500	34000	30000	27500		
	10 psi	52000	52000	51000	49600	50000	49000	46500		
	15 psi	68000	68000	67500	65500	66000	64700	61500		
4" *	25 psi	90000	90000	89000	88000	88500	84500	87000		
	40 psi	125000	125000	124000	120000	121500	118000	116500		
	50 psi	150000	150000	148000	145000	146500	143300	139500		
4" *	60 psi	175000	175000	174000	171200	172000	170000	165500		
	8" w.c.	5500	4500	—	—	—	—	—	2½" Model 121-12	
	14" w.c.	9700	9000	7300	—	—	—	—		
1 psi	14400	14000	13000	12000	—	—	—			
2 psi	22200	22000	21000	19100	20000	—	—			
3 psi	29100	29000	27900	26000	27100	21500	—			
2½" *	5 psi	39500	39500	38700	37000	37600	33500	27500		
	10 psi	58000	58000	57000	54800	55500	53000	52000		
	15 psi	75500	75500	74000	71900	72300	70100	66500		
3" *	25 psi	100000	100000	99000	97100	98000	94000	94000		
	40 psi	140000	140000	138000	133500	135000	130000	129500		
	50 psi	166000	166000	164000	156000	158000	155000	153500		
4" *	60 psi	195000	195000	193000	189700	191000	188000	179000		

*See NOTE in upper part of page 4.

NOTE: The above performance data is based on normal testing at 70°F flowing temperature. Changes in performance can occur at extreme low flowing temperatures.

1½", 2" and 2½" Models 121-8 and 121-8HP Capacity in scfh of natural gas

(0.6 Specific Gravity – 14.65 psia – 60°F)

Regulator Size and Model	Outlet Pressure		Pipe Size	Inlet Pressure	Outlet Pressure		Regulator Size and Model
	Set-Point 3 psi	Set-Point 2 psi			Set-Point 5 psi	Set-Point 10 psi	
	Black Spring ½ psi. Droop	Orange Spring ¼ psi. Droop			Cadmium Spring ½ psi. Droop	Cadmium & White Spring 1 psi. Droop	
1½" Model 121-8	—	8500	1½" *	3 psi	—	—	1½" Model 121-8HP†
	11000	13000		5 psi	—	—	
	20000	21000		10 psi	16500	—	
	26000	27000		15 psi	24500	22000	
	35100	36000		25 psi	33000	30000	
	47000	50000		40 psi	44500	42700	
	63500	66000		50 psi	62000	60500	
	70000	71500		60 psi	68000	66500	
2" Model 121-8	—	15000	2" *	3 psi	—	—	2" Model 121-8HP†
	20000	24000		5 psi	—	—	
	37000	39000		10 psi	30000	—	
	48000	50000		15 psi	45000	40000	
	64000	65000		25 psi	60000	55000	
	85000	90000		40 psi	80000	76000	
	116000	120000		50 psi	114000	110000	
127000	130000	60 psi	123000	121000			
2½" Model 121-8	—	16700	2½" *	3 psi	—	—	2½" Model 121-8HP†
	22000	26700		5 psi	—	—	
	41000	43500		10 psi	33500	—	
	53500	55000		15 psi	50000	44500	
	71000	72000		25 psi	66500	61000	
	94500	100000		40 psi	89000	85000	
	129000	133000		50 psi	127000	122000	
140000	144000	60 psi	135000	130000			

* See NOTE in upper part of page 4.

† These Regulators use the High Pressure Spring Adjustment.

NOTE: The above performance data is based on normal testing at 70°F flowing temperature. Changes in performance can occur at extreme low flowing temperatures.

¾", 1" and 1¼" Models 121-8 and 121-8HP

Capacity in scfh of natural gas

(0.6 Specific Gravity – 14.65 psia – 60°F)

Pipe Size	Inlet Pressure	Outlet Pressure							Regulator Size and Model	
		Set-Point 5" W.C.	Set-Point 7" W.C.	Set-Point 11" W.C.	Set-Point 18" W.C.	Set-Point 28" W.C.	Set-Point 2 psi.	Set-Point 3 psi.		
		Red/Black Spring 1" w.c. Droop	Blue/Black Spring 1" w.c. Droop	Green/Black Spring 2" w.c. Droop	Green Spring 2" w.c. Droop	Green Spring 3" w.c. Droop	Orange Spring ¼ psi. Droop	Black Spring ½ psi. Droop		
1" *	8" w.c.	1500	1000	—	—	—	—	—	¾" x 1" 1" x 1" Model 121-8	
	14" w.c.	2500	2300	2000	—	—	—	—		
	1 psi	4200	4000	3600	2500	—	—	—		
	2 psi	6100	6000	5500	5000	5200	—	—		
	3 psi	7700	7500	7400	7200	7300	6000	—		
2" *	5 psi	11200	10000	9900	9700	9800	9000	7500		
	10 psi	14500	14000	13700	13000	13500	12200	11500		
	15 psi	17300	17000	16500	15800	16000	15000	14300		
	25 psi	23200	23000	22700	22000	22500	21400	20000		
	40 psi	32000	32000	31200	30000	31000	30100	29500		
3" *	50 psi	38000	38000	37700	37000	38000	35500	34500		
	60 psi	44000	44000	43300	42500	43000	42000	40000		
1¼" *	8" w.c.	2000	1500	—	—	—	—	—		¾" x 1¼" 1" x 1¼" 1¼" x 1¼" Model 121-8
	14" w.c.	3500	3000	2200	—	—	—	—		
	1 psi	5500	5000	4500	4000	—	—	—		
	2 psi	7800	7500	7000	6000	6200	—	—		
	3 psi	9700	9500	9000	8000	8400	7200	—		
2" *	5 psi	12700	12500	11200	10400	10800	9700	8300		
	10 psi	18000	17850	17000	16000	16300	15400	15000		
	15 psi	22500	22000	21700	20500	21000	18900	18000		
3" *	25 psi	27100	27000	26200	25400	25900	24900	24000		
	40 psi	41000	41000	40000	39000	39600	38400	38000		
	50 psi	48000	48000	45000	43600	44000	42000	40800		
	60 psi	56000	56000	55000	53000	53800	52100	51600		

Regulator Size and Model	Outlet Pressure		Pipe Size	Inlet Pressure	Pipe Size	Outlet Pressure		Regulator Size and Model
	Set-Point 10 psi	Set-Point 5 psi				Set-Point 5 psi	Set-Point 10 psi	
	Cadmium & White Spring 1 psi. Droop	Cadmium Spring ½ psi. Droop				Cadmium Spring ½ psi. Droop	Cadmium & White Spring 1 psi. Droop	
¾" x 1" 1" x 1" Model 121-8HP†	—	11000	1" *	10 psi	1¼" *	—	14200	¾" x 1¼" 1" x 1¼" 1¼" x 1¼" Model 121-8HP†
	10000	14000		15 psi		17300	14000	
	17000	19200		25 psi		23100	20000	
	24000	28000		40 psi		37200	34000	
	30000	34000		50 psi		39800	37000	
	35000	38500		60 psi		50000	45000	

* See NOTE in upper part of page 4.

† These 121-8 Regulators use the High Pressure Spring Adjustment.

NOTE: The above performance data is based on normal testing at 70°F flowing temperature. Changes in performance can occur at extreme low flowing temperatures.

3" and 4" Models 121-16 and 121-12

Capacity in scfh of natural gas

(0.6 Specific Gravity – 14.65 psia – 60°F)

Pipe Size	Inlet Pressure	Outlet Pressure					Regulator Size and Model
		Set-Point 5" W.C.	Set-Point 7" W.C.	Set-Point 11" W.C.	Set-Point 18" W.C.	Set-Point 28" W.C.	
		Red Spring 1" w.c. Droop	Blue Spring 1" w.c. Droop	Green Spring 2" w.c. Droop	Orange Spring 2" w.c. Droop	Orange Spring 3" w.c. Droop	
3" *	8" w.c.	10000	9700	—	—	—	3" Model 121-16
	14" w.c.	19500	19000	18000	—	—	
	1 psi	31000	30800	29000	27000	—	
	2 psi	47000	46000	46000	34000	35000	
	3 psi	60000	59000	58000	53000	55000	
4" *	5 psi	80000	80000	78000	74000	75000	
	10 psi	12500	125000	120000	120000	125000	
6" *	15 psi	14500	145000	145000	138500	140000	
	25 psi	190000	190000	190000	185000	190000	
6" *	40 psi	260000	260000	260000	260000	260000	
	8" w.c.	18000	17200	—	—	—	4" Model 121-16
14" w.c.	34500	34000	29000	—	—		
4" *	1 psi	56400	56000	49000	47200	—	
	2 psi	90000	85000	80000	68000	70000	
	3 psi	110000	110000	105000	99000	100000	
6" *	5 psi	145000	145000	140000	131000	135000	
	10 psi	202000	202000	200000	191000	200000	
6" *	15 psi	252000	252000	245000	240000	250000	

* See NOTE in upper part of page 4.

Regulator Size and Model	Outlet Pressure			Inlet Pressure	Outlet Pressure			Regulator Size and Model
	Set-Point 3 psi	Set-Point 2 psi	Set-Point 1 psi		Set-Point 1 psi	Set-Point 2 psi	Set-Point 3 psi	
	Cadmium Spring ½ psi. Droop	Black Spring ¼ psi. Droop	Black Spring ¼ psi. Droop		Black Spring ¼ psi. Droop	Black Spring ¼ psi. Droop	Cadmium Spring ½ psi. Droop	
3" Model 121-12	—	—	35000	2 psi	60000	—	—	4" Model 121-12
	—	40000	53000	3 psi	90000	70000	—	
	55000	65000	74000	5 psi	120000	110000	80000	
	90000	100000	110000	10 psi	190000	175000	140000	
	125000	135000	139000	15 psi	240000	225000	200000	
	175000	183000	185000	25 psi	—	—	—	
200000	20000	100000†	40 psi	—	—	—		

† 100,000 is the capacity at a boost of 3" w.c. instead of the 5" w.c. droop indicated.

NOTE: The above performance data is based on normal testing at 70°F flowing temperature. Changes in performance can occur at extreme low flowing temperatures.