

# Model 121 Regulators

Data Sheet - Pilot Operated, Pressure Loaded, and V-Port Valve Options

## Model 121 Regulators

### Pilot Operated, Pressure Loaded, and V-Port Valve Options

Three options are available for 1½", 2" & 2½" Model 121 regulators

*These product variations increase versatility, address a wide range of applications and enhance performance.*

#### 121 Pilot Operated (121-RPC)

- Precision regulation of pressure to a setpoint
- +/- 0.5% absolute outlet pressure accuracy
- 3½" w.c.-35 psig outlet pressure range

#### 121 Pressure Loaded (121-8PL)

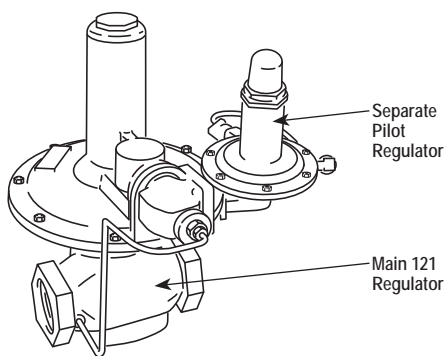
- Constant loading pressure on diaphragm
- +/- 5.0% absolute outlet pressure accuracy
- 1 psig-35 psig outlet pressure range
- Bleeds to line

#### 121 With V-Port Valves

- 40:1 turndown
- Excellent low-flow performance
- Eliminate or reduce pulsation

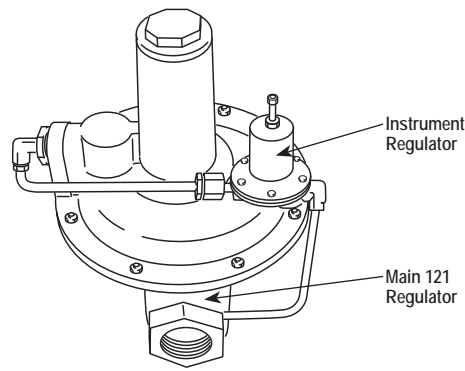
#### Other 121 Regulator Variations are Installed on Thousands of Combustion Applications Worldwide

- Standard regulator
- Zero governor
- Atmospheric regulator
- Differential regulator
- Back pressure regulator
- Relief valve
- Vacuum regulator
- Monitoring or external control line



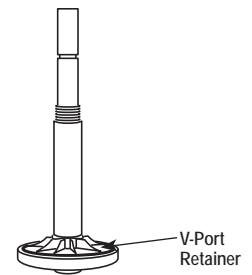
Model 121-RPC

GDS1328-005



Model 121-8PL

GDS1328-010



121 Valve with V-Port Wings

GDS1328-015

### Capacity Tables – 1½" Models 121-RPC and 121-8PL in SCFH of Natural Gas

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

Model	Outlet Pressure	Inlet Pressure															
		2	3	5	7	10	15	20	25	30	35	40	45	50	55	60	
121-RPC	0.13	13043	16152	21035	24981	29940	36750	43000	49250	55500	61750	68000	74250	80500	86750	93000	
	0.25	12650	15862	20851	24858	29877	36750	43000	49250	55500	61750	68000	74250	80500	86750	93000	
	0.51	11800	15244	20462	24597	29741	36750	43000	49250	55500	61750	68000	74250	80500	86750	93000	
	121-8PL	1.00	9811	13874	19621	24031	29432	36750	43000	49250	55500	61750	68000	74250	80500	86750	93000
		2.00		10124	17536	22638	28636	36503	43000	49250	55500	61750	68000	74250	80500	86750	93000
		3.00			14748	20857	27591	36125	43000	49250	55500	61750	68000	74250	80500	86750	93000
		5.00				15572	24622	34821	42647	49250	55500	61750	68000	74250	80500	86750	93000
		7.00					20031	32711	41698	49066	55500	61750	68000	74250	80500	86750	93000
		10.00						27613	39051	47828	55227	61750	68000	74250	80500	86750	93000
		15.00							30311	42866	52500	60622	67777	74250	80500	86750	93000
		20.00								32787	46368	56789	65574	73314	80312	86750	93000
		25.00									35089	49624	60776	70178	78462	85951	92837
		30.00											37249	52678	64517	74498	83292
	35.00													39291	55565	68053	78581

### Capacity Tables – 2" Models 121-RPC and 121-8PL in SCFH of Natural Gas

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

Model	Outlet Pressure	Inlet Pressure															
		2	3	5	7	10	15	20	25	30	35	40	45	50	55	60	
121-RPC	0.13	23477	29074	37863	44966	53893	66150	77400	88650	99900	111150	122400	133650	144900	156150	167400	
	0.25	22770	28551	37531	44744	53779	66150	77400	88650	99900	111150	122400	133650	144900	156150	167400	
	0.51	21240	27440	36832	44275	53533	66150	77400	88650	99900	111150	122400	133650	144900	156150	167400	
	121-8PL	1.00	17659	24974	35319	43256	52978	66150	77400	88650	99900	111150	122400	133650	144900	156150	167400
		2.00		18224	31564	40749	51544	65706	77400	88650	99900	111150	122400	133650	144900	156150	167400
		3.00			26546	37542	49663	65025	77400	88650	99900	111150	122400	133650	144900	156150	167400
		5.00				28030	44320	62678	76779	88650	99900	111150	122400	133650	144900	156150	167400
		7.00					36056	58880	75096	88333	99408	111150	122400	133650	144900	156150	167400
		10.00						49704	70396	86145	99408	111150	122400	133650	144900	156150	167400
		15.00							54897	77349	94500	109119	121999	133650	144900	156150	167400
		20.00								59517	83463	102220	118034	131966	144561	156150	167400
		25.00									63161	89322	109397	126321	141231	154711	167400
		30.00											67048	94821	116131	134097	149925
	35.00													70723	100017	122496	141446

**Capacity Tables – 2½" Models 121-RPC and 121-8PL in SCFH of Natural Gas**

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

Model	Outlet Pressure	Inlet Pressure															
		2	3	5	7	10	15	20	25	30	35	40	45	50	55	60	
121-RPC	0.13	26085	32305	42070	49962	59881	73500	86000	98500	111000	123500	136000	148500	161000	173500	186000	
	0.25	25299	31724	41702	49716	59755	73500	86000	98500	111000	123500	136000	148500	161000	173500	186000	
	0.51	23599	30489	40925	49195	59481	73500	86000	98500	111000	123500	136000	148500	161000	173500	186000	
	121-8PL	1.00	19621	27749	39243	48062	58864	73500	86000	98500	111000	123500	136000	148500	161000	173500	186000
		2.00		20248	35071	45277	57271	73007	86000	98500	111000	123500	136000	148500	161000	173500	186000
		3.00			29496	41713	55182	72250	86000	98500	111000	123500	136000	148500	161000	173500	186000
		5.00				31145	49244	69642	85294	98500	111000	123500	136000	148500	161000	173500	186000
		7.00					40062	65422	83397	98133	111000	123500	136000	148500	161000	173500	186000
		10.00						55227	78102	95656	110454	123500	136000	148500	161000	173500	186000
		15.00							60622	85732	105000	121244	135554	148500	161000	173500	186000
		20.00								65574	92736	113578	131149	146629	160624	173500	186000
		25.00									70178	99247	121552	140357	156924	171901	185674
		30.00										74498	105357	129035	148997	166583	182483
	35.00											78581	111131	136107	157162	175713	

**Capacities for 1½", 2", and 2½" Model 121-8 and 121-8PL Regulators with V-Port Valves Are Approximately 80% of the Published Data Found in Bulletin BR-G-REG-1328.**

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