

*** APPLICATION NOTES ***

1. The Governor regulator is ANSI Z21.80a and ANSI Z21.18 certified for vent limited installations (indoor installations where a vent line is not required) depending upon local codes and standards requirements. Per the terminology of the standard there is no "**vent less regulator**", they are **vent limited** because they can leak up to 2.5 cu.ft. per hr. (1 cu.ft. per hr. propane) per the code. The regulators per code can be installed without installing a vent line but again are technically termed "**vent limited**" per the standard not vent less.
2. The tables listed are guidelines in capacity. The actual capacity can differ based on inlet and outlet piping, type of equipment installed and flowing differential pressure of the system.
3. The Governor is a bubble tight full lockup regulator (it will not leak gas downstream when it shuts off). Lock up of the Governor is certified to CSA ANSI Z21.80a standards. Lock up in any given installation can vary based on, piping, snap acting gas valve on high efficiency equipment, firing rate at the time of equipment shut off, debris in the line, temperature, as well as many other variables. You may see variations in lock up in some installations due to the above Pietro Fiorentini will not guarantee the lock up will meet your equipment requirement due to these variations in installations and piping.
4. The low Capacity GOVERNORS 1/2" - 1" are intended for use on equipment such as unit heaters or simple on/off furnace applications.
5. Use the High Capacity GOVERNORS on all "High Efficiency" quick acting gas valve applications, such as generators, pool heaters, or high turn down boilers. Install a regulator on each individual piece of equipment. Size the regulator at minimum 50% to 100% of listed capacity to minimize high lock-up. Make sure you match the regulator pipe size to the pipe size of the equipments gas train and design the piping to minimize pressure drop to 1" W.C. between the regulator and the gas train.
6. Try to match the GOVERNOR regulator to the pipe size of the equipment and minimize pressure drop between the regulator and equipment to 1" W.C.. Minimize the amount of elbows and fittings between the regulator and the equipment and use full port ball valves not plug valves or reduced port valves.
7. Be careful on applications where you increase the outlet piping more than 1 diameter. You may need to install an external control line in the larger piping. The GOVERNOR can be ordered with or retrofitted with an external control line.
8. Make sure on all installations you don't install the regulator directly at the equipment. Install the regulator 3 to 10 feet away depending on the application.
9. **Never install the external brass vent limiter outdoors.** For outdoors installation install appropriate vent protection.
10. All GOVERNORS include an inlet filter. The filter and/or regulator may be cleaned by removing the bottom plate Torx security screws, bottom plate assembly, then remove the filter. The filter can then be cleaned with detergent or Buna compatible solvent and dried. The valve and orifice can be cleaned with a cloth while the bottom plate is off. Then reassemble the unit.
11. If there are ever any questions on the installation or application of the Governor regulator, immediately contact your local authorized distributor or representative.
12. The maximum inlet pressure on the regulator label is the required maximum pressure of the CSA ANSI Z21.80 rating. It is not always the maximum allowable operating inlet pressure of the regulator. The rating is a CSA requirement.



GOVERNOR

Line Pressure Regulators

Over Pressure Device (OPD) Model

5 PSIG



Main Features

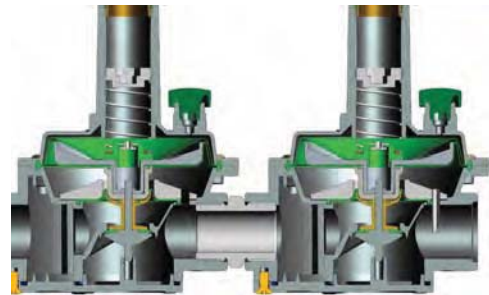
- Worker & Monitor for added Safety
- CSA Certified 6.22a-2005 ANSI Z21.80A2005 Class I for outlet pressures up to 14" W.C. and inlet pressures up to 5 PSIG
- CSA Certified 6.22a-2005 ANSI Z21.80A2005 Class II for outlet pressures up to 1 PSIG and inlet pressures up to 5 PSIG
- Integral Vent Limiter
- CSA approved External Vent Limiter – no vent line required**
- Positive 100% bubble tight lockup
- Inlet and Outlet test ports
- 500 to 1 Turndown

Specifications

- Suitable for use with Natural Gas, LPG, and other non-corrosive, clean gas
- Inlet Pressure: 7" W.C. to 5 PSIG CSA approved
- Max. Inlet 7.25 PSIG for non-CSA
- Outlet pressure: 2" W.C. to 14" W.C. for CSA Class I
Outlet pressure: 2" W.C. to 1 PSIG for CSA Class II
Outlet pressure: 2" W.C. to 4.25 PSIG for non-CSA
- Temperature range: -40°F to 150°F
- Connections: 1/2" thru 4"
- Maximum Emergency Inlet Exposure Pressure: 80 PSIG
- Suitable for Indoor or Outdoor Installation

** Brass Vent Limiters must be removed for outdoor installation **

OverPressure Device (OPD) Model
Inlet Pressure Range: 7" W.C. to 5 PSIG



Vent Sizes

- 1/4" NPT 1/2" – 1"
- 1/2" NPT 1 1/4" – 4"

Outlet Spring Range

- Green 2" W .C. to 5.1" W.C.*
- Red 2.75" W .C. to 7.87" W.C.*
- Black 6" W.C. to 14" W.C.*
- Yellow 9.8" W.C. to 27.5" W.C.*
- Violet 23.6" W.C. to 59" W.C. or 0.85 to 2.13 PSIG *
- Orange 55" W.C. to 118" W.C. or 2 to 4.26 PSIG

*Spring is CSA outlet pressure certified

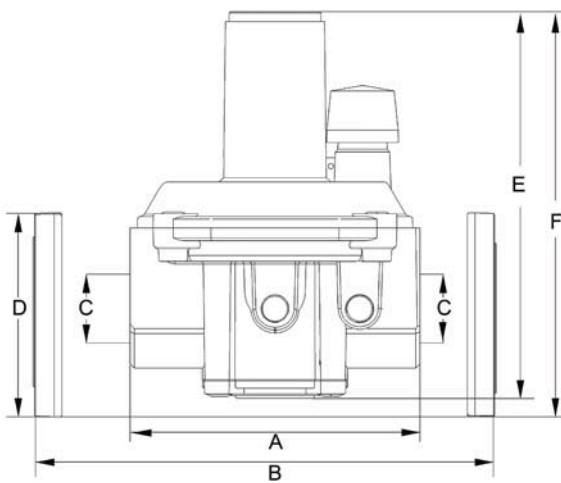
CAPACITY IN CFH FOR .60 SPECIFIC GRAVITY GAS WITH FILTER (CAPACITY WITHOUT FILTER IN BRACKETS)

	Outlet Pressure Set Point	Operating Inlet Pressure	
		3 PSIG	5 PSIG
		8" W.C.	785 (923)
	11" W.C.	788 (927)	788 (927)
	14" W.C.	790 (930)	790 (930)
31051OPD ½"	Outlet Pressure Set Point	Operating Inlet Pressure	
	8" W.C.	946 (1,154)	946 (1,154)
	11" W.C.	950 (1,158)	950 (1,158)
	14" W.C.	953 (1,163)	953 (1,163)
31052OPD ¾"	Outlet Pressure Set Point	Operating Inlet Pressure	
	8" W.C.	1,270 (1,500)	1,270 (1,500)
	11" W.C.	1,274 (1,506)	1,274 (1,506)
	14" W.C.	1,279 (1,512)	1,279 (1,512)
31053OPD 1"	Outlet Pressure Set Point	Operating Inlet Pressure	
	8" W.C.	1,731 (2,193)	1,731 (2,193)
	11" W.C.	1,738 (2,201)	1,738 (2,201)
	14" W.C.	1,744 (2,209)	1,744 (2,209)
31150OPD ½" High Capacity	Outlet Pressure Set Point	Operating Inlet Pressure	
	8" W.C.	2,020 (2,771)	2,020 (2,771)
	11" W.C.	2,028 (2,781)	2,028 (2,781)
	14" W.C.	2,035 (2,791)	2,035 (2,791)
31151OPD ¾" High Capacity	Outlet Pressure Set Point	Operating Inlet Pressure	
	8" W.C.	2,540 (3,290)	2,540 (3,290)
	11" W.C.	2,549 (3,302)	2,549 (3,302)
	14" W.C.	2,558 (3,314)	2,558 (3,314)
31152OPD 1" High Capacity	Outlet Pressure Set Point	Operating Inlet Pressure	
	8" W.C.	5,311 (7,851)	5,311 (7,851)
	11" W.C.	5,330 (7,880)	5,330 (7,880)
	14" W.C.	5,350 (7,909)	5,350 (7,909)
31153OPD 1¼"	Outlet Pressure Set Point	Operating Inlet Pressure	
	8" W.C.	6,581 (8,197)	6,581 (8,197)
	11" W.C.	6,605 (8,228)	6,605 (8,228)
	14" W.C.	6,629 (8,258)	6,629 (8,258)
31154OPD 1 ½"	Outlet Pressure Set Point	Operating Inlet Pressure	
	8" W.C.	13,278 (15,009)	13,278 (15,009)
	11" W.C.	13,327 (15,065)	13,327 (15,065)
	14" W.C.	13,375 (15,120)	13,375 (15,120)
31155OPD 2"	Outlet Pressure Set Point	Operating Inlet Pressure	
	8" W.C.	16,741 (19,051)	16,741 (19,051)
	11" W.C.	16,803 (19,121)	16,803 (19,121)
	14" W.C.	16,865 (19,191)	16,865 (19,191)
31156OPD 2 ½"	Outlet Pressure Set Point	Operating Inlet Pressure	
	8" W.C.	18,473 (23,092)	18,473 (23,092)
	11" W.C.	18,542 (23,177)	18,542 (23,177)
	14" W.C.	18,610 (23,262)	18,610 (23,262)
31157OPD 3"	Outlet Pressure Set Point	Operating Inlet Pressure	
	8" W.C.	32,906 (40,411)	32,906 (40,411)
	11" W.C.	33,027 (40,560)	33,027 (40,560)
	14" W.C.	33,149 (40,709)	33,149 (40,709)
31158OPD 4"	Outlet Pressure Set Point	Operating Inlet Pressure	
	8" W.C.	32,906 (40,411)	32,906 (40,411)
	11" W.C.	33,027 (40,560)	33,027 (40,560)
	14" W.C.	33,149 (40,709)	33,149 (40,709)

NOTE: Flow rates are actual stated recommended capacities, for optimal performance.

For additional sizing, visit www.GasInside.com • 888.618.8787

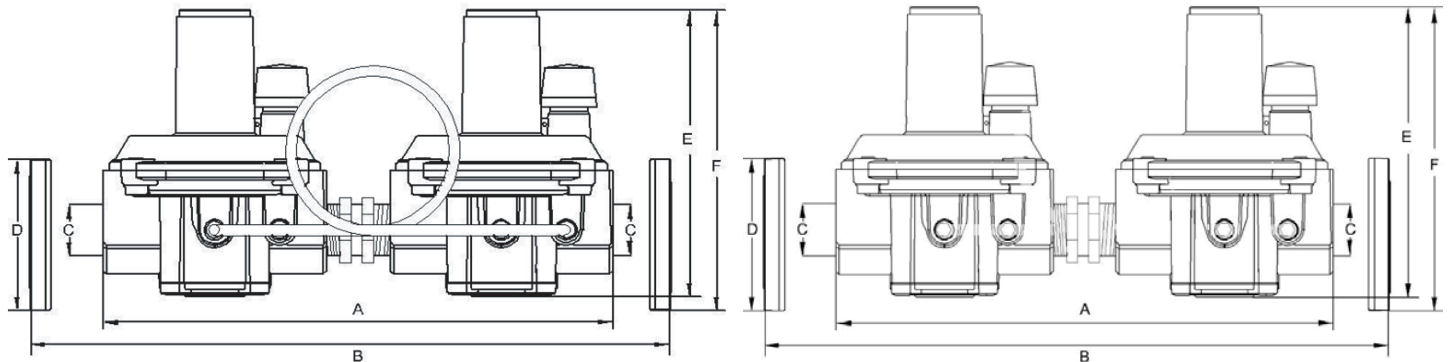
GOVERNOR Standard Model - Dimensions



DIMENSIONS (IN INCHES)

Model #	Size	A	B	C	D	E	F	Weight (Lbs)
31051	1/2" NPT	4.29	-	1/2	-	5.59	-	1.54
31052	3/4" NPT	4.29	-	3/4	-	5.59	-	1.54
31053	1" NPT	4.29	-	1	-	5.59	-	1.54
31150	1/2" NPT	5.43	-	1/2	-	6.89	-	2.75
31151	3/4" NPT	5.28	-	3/4	-	6.89	-	2.75
31152	1" NPT	5.28	-	1	-	6.89	-	2.75
31153	1 1/4" NPT	7.64	-	1 1/4	-	10	-	7.5
31154	1 1/2" NPT	7.64	-	1 1/2	-	10	-	7.5
31155	2" NPT	9.29	-	2	-	12.44	13.74	12.34
31156/F	2 1/2" FLANGED	-	16.9	3	ANSI 150	-	17.09	27.56
31157/F	3" FLANGED	-	16.9	3	ANSI 150	-	17.09	27.56
31158/F	4" FLANGED	-	16.9	4	ANSI 150	-	19.76	27.56

GOVERNOR Over Pressure Device (OPD) Model & Dual Cut (DC) Model - Dimensions



DIMENSIONS (IN INCHES)

Model #	Size	A	B	C	D	E	F	Weight (Lbs)
31051	1/2" NPT	8.86	-	1/2	-	5.59	-	3.25
31052	3/4" NPT	8.86	-	3/4	-	5.59	-	3.25
31053	1" NPT	8.86	-	1	-	5.59	-	3.25
31150	1/2" NPT	11.22	-	1/2	-	6.89	-	5.75
31151	3/4" NPT	11.22	-	3/4	-	6.89	-	5.75
31152	1" NPT	11.22	-	1	-	6.89	-	5.75
31153	1 1/4" NPT	16.61	-	1 1/4	-	10	-	15.5
31154	1 1/2" NPT	16.61	-	1 1/2	-	10	-	15.5
31155	2" NPT	19.88	-	2	-	12.44	13.74	25
31156/F	2 1/2" FLANGED	-	33.93	3	ANSI 150	-	17.09	56
31157/F	3" FLANGED	-	33.93	3	ANSI 150	-	17.09	56
31158/F	4" FLANGED	-	33.93	4	ANSI 150	-	19.76	56