



# BLANKET GAS REGULATOR

## 3000 SERIES



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The Groth Blanket Gas Regulators ensure that a constant gas pressure is maintained in the vapor space of a storage tank. A blanket gas regulator supplies an inert gas to prevent a vacuum from developing when liquid is removed from a tank, to maintain the desired blanket pressure when the temperature drops and to prevent outside air from contaminating the tank or creating a flammable or explosive environment. Product conservation and a significant reduction in tank emissions are the final result.

## Technical Details

- Materials: 316 Stainless Steel
- Setting ranges from 0.5 InWC to 15 psig
- 1/2" Adjustable Orifice Selector 25% to 100%
- 1" Adjustable Orifice Selector 5% to 100%
- API 2000
- ISO 28300
- EPA Publication AP-42
- NFPA 69 – Standard on Explosion Prevention Systems
- OSHA Part 1910.110
- ATEX Certified (3011L, 3011H, 3011HP, 3020A, 3041L, 3041H, 3041HP)

## Features

- Variable orifice, field-adjustable flow capacity
- Bubble-tight shut off
- Single stage regulator
- Modulating opening
- Minimal lock up and droop

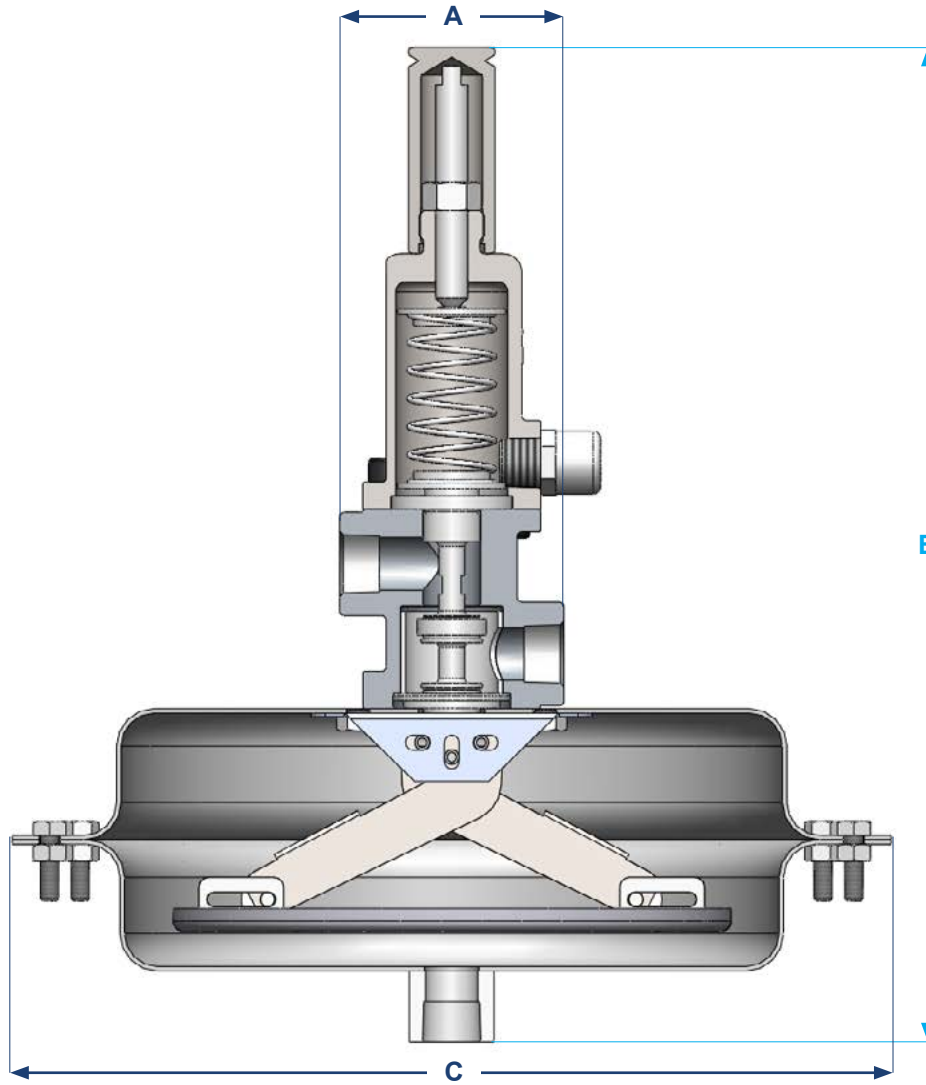
## Options

- Soft Goods - Buna-N, FFKM, EPDM, FKM



# SPECIFICATIONS

Model Number	Size	A Inches (mm)	B Inches (mm)	C Inches (mm)	Actuator MAWP psig (barg)	Shipping Weight Lbs (kg)
3011L	1/2"	3.00 (76.2)	14.46 (367.3)	14.00 (355.6)	2 (.13)	13 (5.9)
3011L	1"	3.75 (95.3)	19.13 (485.9)	19.50 (495.3)	2 (.13)	33 (15)
3011H	1/2"	3.00 (76.2)	13.26 (336.8)	11.75 (298.5)	8 (0.55)	10 (4.5)
3011H	1"	3.75 (95.3)	17.88 (438.1)	14.00 (355.6)	8 (0.55)	24 (11)
3011HP	1"	3.75 (95.3)	17.25 (438.1)	14.00 (355.6)	25 (1.7)	24 (11)
3020A	1"	3.75 (95.3)	14.50 (368.3)	9.00 (229.6)	75 (5.1)	15 (7)



# MODEL SELECTION

## 1/2" Blanket Gas Regulator

Pressure Setting InWC (mbarg)	Supply Pressure psig (barg)			
	5 to 50 (0.34 to 3.4)	>50 to 100 (3.4 to 6.9)	>100 to 150 (6.9 to 10.3)	>150 to 200 (10.3 to 13.8)
0.5 to <1.0 (1.2 to 2.5)				3011L
1.0 to <1.5 (2.5 to 3.7)				
1.5 to <2.0 (3.7 to 5.0)	3011H			
2.0 to 6.5 (5.0 to 16)				

## 1" Blanket Gas Regulator

Pressure Setting InWC (mbarg)	Supply Pressure psig (barg)			
	5 to 50 (0.34 to 3.4)	>50 to 100 (3.4 to 6.9)	>100 to 150 (6.9 to 10.3)	>150 to 200 (10.3 to 13.8)
0.5 to <1.0 (1.2 to 2.5)		3011L		
1.0 to <1.5 (2.5 to 3.7)			3011L	
1.5 to <2.0 (3.7 to 5.0)	3011H			
2.0 to 6.5 (5.0 to 16)				
6.5 InWC to <2.0 psig (16 to 140)	3011HP			
2.0 psig to 15 psig (0.14 to 1.0 barg)	3020A			

Required flow capacity for a given application should be determined by using API 2000 | ISO 28300 or the relevant sizing standard. Consult the factory to determine the Blanket Gas Regulator size based on the required flow rate, supply pressure, and supply gas.

# SPRING RANGES

## 1/2" Blanket Gas Regulator

Model Number	Max Supply psig (barg)	Min Setting InWC (mbarg)	Max Setting InWC (mbarg)	Spring Range
3011L	200 (13.8)	0.5 (1.2)	0.8 (2.0)	2
	200 (13.8)	0.8 (2.0)	1.0 (2.5)	3
3011H	150 (10.3)	0.5 (1.2)	0.7 (1.7)	1
	200 (13.8)	0.7 (1.7)	1.7 (4.2)	2
	200 (13.8)	1.7 (4.2)	3.0 (7.5)	3
	200 (13.8)	3.0 (7.5)	4.5 (11.2)	4
	200 (13.8)	4.5 (11.2)	6.5 (16.0)	5

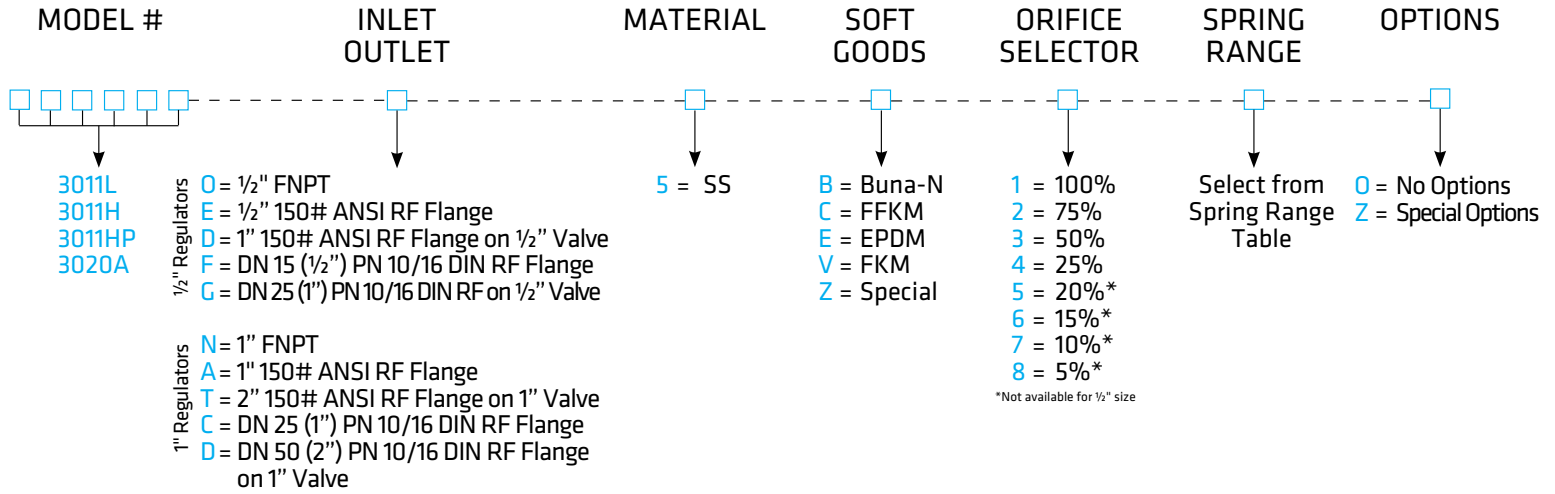
## 1" Blanket Gas Regulator

Model Number	Max Supply psig (barg)	Min Setting InWC (mbarg)	Max Setting InWC (mbarg)	Spring Range
3011L	200 (13.8)	0.5 (1.2)	0.8 (2.0)	3
	200 (13.8)	0.8 (2.0)	1.0 (2.5)	4
	200 (13.8)	1.0 (2.5)	2.0 (5.0)	5
3011H	50 (3.4)	0.5 (1.2)	1.0 (2.5)	1
	100 (6.9)	1.0 (2.5)	1.5 (3.7)	2
	150 (10.3)	1.5 (3.7)	2.0 (5.0)	3
	200 (13.8)	2.0 (5.0)	3.5 (8.7)	4
	200 (13.8)	3.5 (8.7)	6.5 (16.0)	5
3011HP	200 (13.8)	6.5 (16)	11.1 (28)	2
	200 (13.8)	11.1 (28)	18.6 (46)	3
	200 (13.8)	18.6 (46)	1.0 psig (69)	4
	200 (13.8)	1.0 psig (69)	1.38 psig (95)	5
	200 (13.8)	1.38 psig (95)	2.0 psig (140)	6
3020A	200 (13.8)	2.0 psig (140)	3.3 psig (230)	4
	200 (13.8)	3.3 psig (230)	5.1 psig (350)	5
	200 (13.8)	5.1 psig (350)	7.3 psig (500)	6
	200 (13.8)	7.3 psig (500)	15.0 psig (1000)	7

When spring ranges overlap, select the lighter spring. Consult the factory for vacuum regulator with setting greater than 2 psig.

# HOW TO ORDER

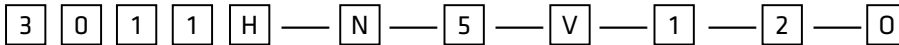
For easy ordering, select proper model numbers



## NOTES

- Include model number and setting when ordering
- For special options, consult factory
- Actuator diaphragm is only available in PFA

## EXAMPLE



Indicates a Model 3011H Regulator with 1" FNPT body connections, 316 SS construction, FKM elastomers, full capacity orifice, set pressure range from 1.0 InWC to 1.5 InWC and no special requirements.



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