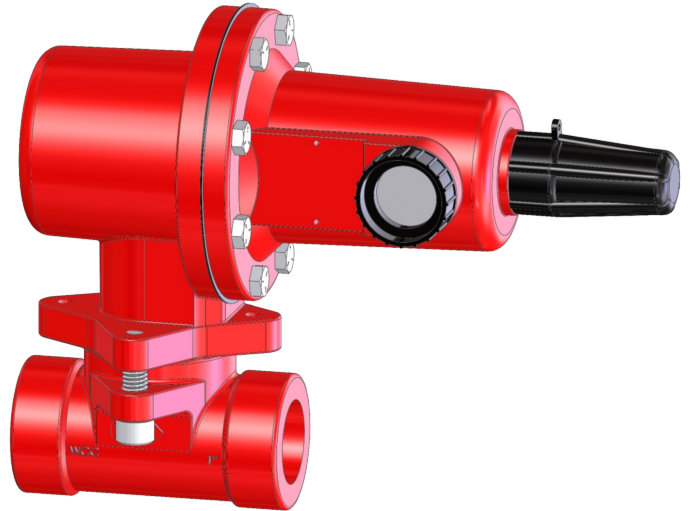


## RG20 Regulator

The RG20 is a direct spring operated, pressure regulator that can be used anywhere pressure regulation of natural gas, air or other gas is required. Its housing can be moved to one of four positions to save space during installation.

The RG20 was designed for easy maintenance by allowing access to the body without removing it from the line. A NACE option is available for sour service.



## Specifications

**Size:** 1" & 2"

**Connection:** Female NPT

**Body Type:** Globe

**Orifice Sizes:** .125" (1/8"), .188" (3/16"), .25", .375" (3/8"), .50"

**Temperature Range:** -20° F to 150° F (-29° C to 66° C)

**Body Pressure Rating:** 2000 psi

**Housing Pressure Rating:**

**To prevent housing failure:** 375 psi

**To prevent leakage to atmosphere:** 250 psi

**To prevent damage to internal parts:** 60 psi above set point

**Weight:** 6.5 lbs (1"), 10.5 lbs (2")

**Materials:**

**Body:** WCB Steel

**Housing and Spring Cover:** Aluminum

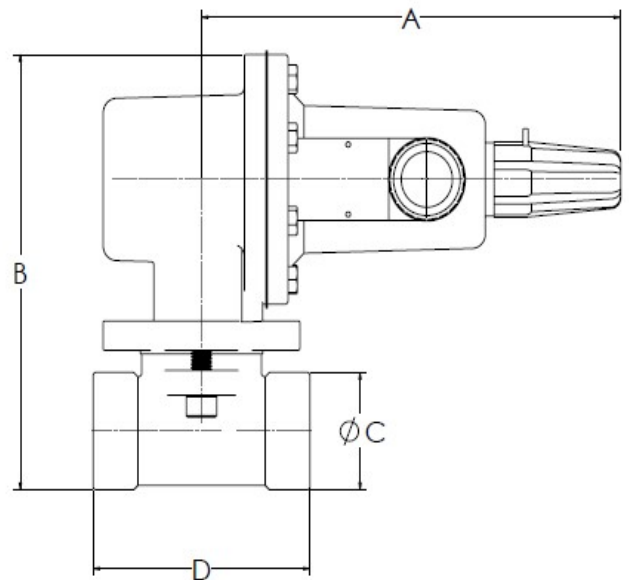
**Orifice and Disk Holder:** Aluminum, Stainless (Optional)

**Disk:** Buna, Viton®, Nylon

**Diaphragm:** Buna, Viton® (Optional)

## Dimensions

Dimensions in inches (mm).



Dimensions								
Body Size	A		B		C		D	
	inches	mm	inches	mm	inches	mm	inches	mm
1"	7.72	196.1	7.40	188.0	2.00	50.8	4.00	101.6
2"	7.72	196.1	8.47	215.1	3.38	85.9	5.00	127.0



# Capacities of 0.6 S.G. Natural Gas in SCFH continued

Outlet Pressure Range	Outlet Pressure		Inlet Pressure		1" Body Size					2" Body Size				
					Orifice Diameter					Orifice Diameter				
					.125"	.188"	.25"	.375"	.50"	.125"	.188"	.25"	.375"	.50"
35 to 80 psig (2.4 to 5.5 bar) Blue Spring	60	4.1	75	5.2	1,230	2,760	4,880	8,630	16,100	1,260	2,760	4,900	9,000	12,300
			100	6.9	1,740	4,010	7,000	13,000	19,300	1,740	4,010	7,000	15,000	20,400
			150	10.3	2,580	5,850	10,500	18,900	32,800	2,580	5,850	10,500	23,300	35,200
			200	13.8	3,370	7,630	13,700	24,000	42,200	3,370	7,630	13,700	30,400	53,900
			300	20.7	4,910	11,200	20,100	32,500	69,100	4,910	11,200	20,100	44,600	79,000
			500	34.5	8,090	18,300	32,900	64,000	94,300	8,090	18,300	32,900	73,000	38,800
			750	51.8	12,000	27,200	43,380	66,000	130,000	12,000	27,200	48,900	53,000	32,000
			1,000	69.0	16,000	36,100	50,300	67,700		16,000	36,100	43,000	52,000	
			1,250	86.2	19,000	45,000	57,000			19,000	45,000	70,000		
			1,500	103	22,000	54,000	63,000			22,000	54,000	43,000		
	1,750	121	25,000	63,000				25,000	26,000					
	2,000	138	28,000					28,000						
	80	5.5	100	5.2	1,600	3,750	6,650	12,200	18,600	1,630	3,750	6,400	12,800	20,400
			150	10.3	2,580	5,850	10,500	21,100	33,600	2,580	5,850	10,500	23,300	41,300
			200	13.8	3,370	7,630	13,700	28,400	44,100	3,370	7,630	13,700	30,400	53,900
			300	20.7	4,910	11,200	20,100	43,300	75,400	4,910	11,200	20,100	44,600	79,000
			500	34.5	8,090	18,300	32,900	71,600	110,000	8,090	18,300	32,900	73,000	48,000
			750	51.8	12,000	27,200	48,900	105,500	135,000	12,000	27,200	48,900	87,000	44,000
			1,000	69.0	16,000	36,100	64,900	118,000		16,000	36,100	65,000	63,000	
			1,250	86.2	19,000	45,000	80,000			19,000	45,000	63,000		
1,500			103	22,000	54,000	96,000			22,000	54,000	86,000			
1,750			121	25,000	63,000				25,000	63,000				
2,000	138	28,000					28,000							
70 to 150 psig (4.8 to 10.3 bar) Red Spring	100	6.9	150	10.3	2,510	5,540	8,710	16,000	24,000	2,510	5,540	8,600	16,000	22,000
			200	13.8	3,370	7,630	12,000	21,300	34,100	3,370	7,630	13,700	22,000	33,000
			300	20.7	4,910	11,200	19,400	30,100	53,200	4,910	11,200	20,100	35,000	65,300
			500	34.5	8,090	18,300	31,800	66,500	83,900	8,090	18,300	32,900	73,000	129,000
			750	51.8	12,000	27,200	47,300	95,300	117,000	12,000	27,200	48,900	108,000	54,000
			1,000	69.0	16,000	36,100	59,700	100,000	120,000	16,000	36,100	64,800	82,000	
			1,250	86.2	19,000	45,000	72,000	114,000		19,000	45,000	80,000	110,000	
			1,500	103	22,000	54,000	86,000			22,000	54,000	96,000		
			1,750	121	25,000	63,000	95,000			25,000	63,000	112,000		
			2,000	138	28,000	71,000				28,000	71,000			
	125	8.6	150	10.3	2,340	5,340	9,470	15,700	20,800	2,340	5,340	8,600	16,000	24,000
			200	13.8	3,320	7,550	13,400	28,100	32,800	3,320	7,550	13,700	24,000	36,000
			300	20.7	4,910	11,200	20,100	36,300	52,600	4,910	11,200	20,100	39,000	65,300
			500	34.5	8,090	18,300	32,900	70,800	109,000	8,090	18,300	32,900	73,000	129,000
			750	51.8	12,000	27,200	48,900	104,000	158,000	12,000	27,200	48,900	108,000	59,000
			1,000	69.0	16,000	36,100	64,800	138,000	160,000	16,000	36,100	64,800	58,000	
			1,250	86.2	19,000	45,000	80,000	145,000		19,000	45,000	80,000	75,000	
			1,500	103	22,000	54,000	96,000			22,000	54,000	96,000		
			1,750	121	25,000	63,000	112,000			25,000	63,000	112,000		
			2,000	138	28,000	71,000				28,000	71,000			
150	10.3	200	13.8	3,200	7,290	12,900	21,400	33,600	3,200	7,290	13,000	24,000	38,000	
		300	20.7	4,910	11,200	17,200	40,100	55,900	4,910	11,200	20,100	44,600	64,200	
		500	34.5	8,090	18,300	32,900	70,300	111,000	8,090	18,300	32,900	73,000	129,000	
		750	51.8	12,000	27,200	48,900	104,000	160,000	12,000	27,200	48,900	108,000	62,000	
		1,000	69.0	16,000	36,100	64,800	138,000	162,000	16,000	36,100	64,800	144,000		
		1,250	86.2	19,000	45,000	80,000	150,000		19,000	45,000	80,000	81,000		
		1,500	103	22,000	54,000	96,000			22,000	54,000	96,000			
		1,750	121	25,000	63,000	112,000			25,000	63,000	112,000			
		2,000	138	28,000	71,000				28,000	71,000				

- Capacity is based on 20 percent droop unless otherwise noted below.
- For pressure setting under 10 psig (0.69 bar) limit the input pressure to 100 psig (6.9 bar) to obtain the setpoint.
- For 5 psig (0.34 bar) pressure set point, the droop is 2 psig (0.14 bar).
- Grayed out areas indicate that the inlet pressure is too high for a given orifice size.
- 10-95 psi utility spring available.
- To convert capacities to another gas multiply by .775 and divide by the square root of the specific gravity of the desired gas.

# Pressure Ranges

Outlet Pressure Range	Orifice Size	Maximum Inlet Pressure					
		Nylon Disk		Buna Disk		Viton® Disk	
		psi	bar	psi	bar	psi	bar
5 <sup>1</sup> to 20 psig (0.34 to 1.4 bar)	.125"	1000	69	1000	69.0	300	20.7
	.188"	750	51.7	750	51.7	300	20.7
	.25"	500	34.5	500	34.5	300	20.7
	.375"	300	20.7	300	20.7	300	20.7
	.50"	250	17.2	250	17.2	250	17.2
15 to 40 psig (1.0 to 2.8 bar)	.125"	1500	103.4	1000	69.0	300	20.7
	.188"	1000	69.0	1000	69.0	300	20.7
	.25"	750	51.7	750	51.7	300	20.7
	.375"	500	34.5	500	34.5	300	20.7
	.50"	300	20.7	300	20.7	300	20.7
35 to 80 psig (2.4 to 5.5 bar)	.125"	2000	137.9	1000	69.0	300	20.7
	.188"	1750	120.7	1000	69.0	300	20.7
	.25"	1500	103.4	1000	69.0	300	20.7
	.375"	1000	69.0	1000	69.0	300	20.7
	.50"	750	51.7	750	51.7	300	20.7
70 to 150 psig (4.8 to 10.3 bar)	.125"	2000	137.9	1000	69.0	300	20.7
	.188"	2000	137.9	1000	69.0	300	20.7
	.25"	1750	120.7	1000	69.0	300	20.7
	.375"	1250	86.2	1000	69.0	300	20.7
	.50"	750	51.7	750	51.7	300	20.7

1. For outlet pressure setting below 10 psi (.69 bar) the inlet pressure should be 100 psi (6.9 bar) or less.

## How to Order

The part numbering system is detailed below.

Example Model No. **RG20-1N50-A1B6-3**

RG20 Series Regulator, 1" Body, Threaded Ends, Aluminum Disk Holder, Buna Diaphragm, Buna Seat and Seals, .375" Orifice, 35-80 PSI Spring

<b>Connection Size</b>	
1 - 1"	2 - 2"
<b>Connection Type</b>	
N - NPT	F - RFF
<b>Class</b>	
50 - Threaded	30 - 300
10 - 150	60 - 600
<b>Trim Material</b>	
A - Aluminum	T - Stainless (NACE)
<b>Diaphragm Material</b>	
1 - Buna	2 - Viton® (NACE)
<b>Seat Material</b>	
V - Viton® (NACE)	B - Buna
N - Nylon	
<b>Orifice Size</b>	
2 - .125" (1/8")	4 - .25"
8 - .50"	
3 - .188" (3/16")	6 - .375" (3/8")
<b>Outlet Spring Range</b>	
1 - 5-20 psi	3 - 35-80 psi
5 - 10-95	
2 - 15-40 psi	4 - 70-150 psi

**RG20 - 1 N 50 - A 1 B 6 - 3**

Repair kits available.

Note: Nylon is only recommended for use with springs 3 and 4 (35-150 psi).



Phone: 409-225-5863  
Fax: 409-242-1005  
1009 Laurel Street  
Beaumont, Texas 77701