

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.

The RG20H, a high pressure option, is available which includes a steel housing and spring cover capable of handling downstream pressures above 150 psi.

The RG20R is a self-relieving version of the RG20. If the downstream pressure exceeds the setpoint the RG20R will vent the excess pressure to atmosphere.



SPECIFICATIONS

Sizes:

- 1"
- 2"

Connection:

- Female NPT
- Flanged

Body Type:

- Globe

Orifice Sizes:

- 0.125" (1/8")
- 0.188" (3/16")
- 0.25"
- 0.375" (3/8")
- 0.50"

Temperature Range:

- -20° F to 180° F (-29° C to 82° C)

Body Pressure Rating:

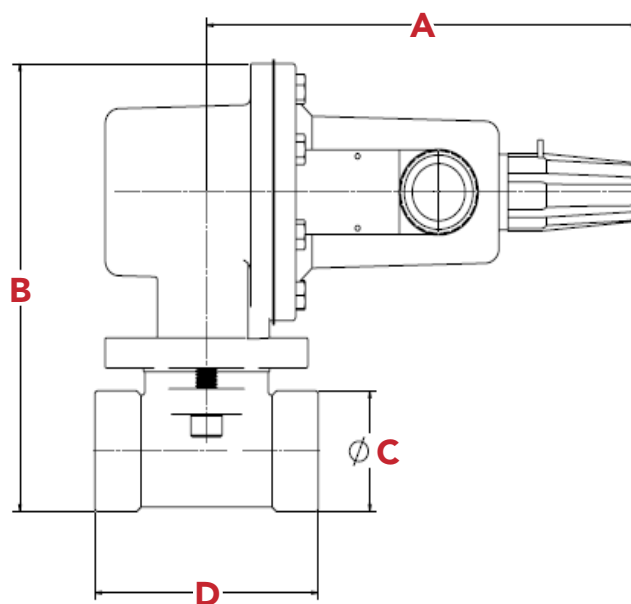
- 2000 psi

Approximate Weight:

- Aluminum: 1" - 6.5 lbs; 2" - 10.5 lbs
- Steel: 1" - 10 lbs; 2" - 14 lbs

DIMENSIONS

Dimensions are in inches (mm).



MATERIALS

Body:

- WCB Steel

Housing and Spring Cover:

- Aluminum (RG20 & RG20R)
- WCB Steel (RG20H)

Orifice and Disk Holder:

- Aluminum
- Stainless (Optional, Required for RG20H)

Disk:

- Buna
- Viton®
- Nylon (RG20H requires Nylon disk)

Diaphragm:

- Buna
- Viton® (Optional)

HOUSING AND SPRING COVER PRESSURE RATINGS

PRESSURE LIMITATIONS (ABOVE SET POINT):	RG20	RG20R	RG20H
To prevent housing failure	375 psi	375 psi	1500 psi
To prevent leakage to atmosphere	250 psi	250 psi	800 psi
To prevent damage to internal parts	60 psi	120 psi	120 psi

BODY SIZE	A	B	C	D
	inches (mm)	inches (mm)	inches (mm)	inches (mm)
1"	7.72 (196.10)	7.40 (188.00)	2.00 (50.80)	4.00 (101.60)
2"	7.72 (196.10)	8.47 (215.10)	3.38 (85.90)	5.00 (127.00)



CAPACITIES OF 0.6 S.G. NATURAL GAS IN SCFH

RG20

OUTLET PRESSURE RANGE	OUTLET PRESSURE PSIG (bar)	INLET PRESSURE, PSIG (bar)	Orifice Diameter, Inches (mm)									
			1" Body Size					2" Body Size				
			0.125"	0.188"	0.25"	0.375"	0.50"	0.125"	0.188"	0.25"	0.375"	0.50"
5 to 20 psig ² (0.34 to 1.4 bar) Yellow Spring	5 ³ (0.34)	10 (0.69)	330	710	1,100	1,900	2,500	330	710	1,080	1,700	2,400
		15 (1.00)	390	890	1,600	2,500	3,350	390	890	1,250	1,900	2,700
		20 (1.40)	500	1,160	2,060	3,400	4,450	500	1,160	1,900	2,650	3,900
		30 (2.10)	670	1,560	2,800	4,750	6,900	670	1,560	2,800	3,680	6,500
		60 (4.10)	1,170	2,600	4,710	8,140	13,700	1,170	2,600	4,750	7,250	17,800
		75 (5.20)	1,410	3,150	5,710	9,790	14,500	1,410	3,150	5,700	8,060	22,400
		100 (6.90)	1,800	4,070	7,310	12,500	16,000	1,790	4,070	7,310	16,200	28,700
	10 (0.69)	15 (1.03)	375	880	1,590	2,480	3,300	375	880	1,220	1,860	2,670
		20 (1.40)	490	1,150	2,050	3,380	4,410	490	1,150	1,880	2,610	3,830
		30 (2.10)	670	1,560	2,800	4,720	6,840	670	1,560	2,760	3,640	6,460
		60 (4.10)	1,170	2,600	4,710	8,140	13,700	1,170	2,600	4,750	7,250	17,800
		75 (5.20)	1,410	3,150	5,710	9,790	14,500	1,410	3,150	5,700	8,060	22,400
		100 (6.90)	1,800	4,070	7,310	12,500	16,000	1,790	4,070	7,310	16,200	28,700
		150 (10.30)	2,580	5,850	10,500	17,000	18,000	2,580	5,850	10,500	23,300	25,900
		200 (13.80)	3,370	7,630	13,700	18,000	18,500	3,370	7,630	13,700	22,700	24,000
		300 (20.70)	4,910	11,200	19,800	20,000	--	4,910	11,200	10,300	12,800	--
		500 (34.50)	8,090	15,700	20,000	--	--	8,090	18,300	21,000	--	--
		750 (51.70)	12,000	18,000	--	--	--	12,000	27,200	--	--	--
		1,000 (69.0)	14,000	--	--	--	--	16,000	--	--	--	--
		1,250 (86.20)	--	--	--	--	--	--	--	--	--	--
		1,500 (103.00)	--	--	--	--	--	--	--	--	--	--
		1,750 (121.00)	--	--	--	--	--	--	--	--	--	--
		2,000 (138.00)	--	--	--	--	--	--	--	--	--	--
	20 (1.4)	30 (2.10)	620	1,450	2,580	4,360	6,290	620	1,450	2,350	4,300	6,110
		50 (3.4)	1,000	2,280	4,090	7,870	14,100	1,000	2,280	4,040	7,100	12,800
		60 (4.10)	1,170	2,640	4,750	9,690	14,500	1,170	2,640	4,750	8,400	15,700
		100 (6.90)	1,800	4,070	7,310	13,900	23,300	1,800	4,070	7,310	16,200	28,700
		150 (10.30)	2,580	5,850	10,500	17,700	34,200	2,580	5,850	10,500	23,300	29,000
		200 (13.80)	3,370	7,630	13,700	26,600	39,100	3,370	7,630	13,700	24,000	33,000
		300 (20.70)	4,910	11,200	20,100	37,000	--	4,910	11,200	20,100	19,600	--
		500 (34.50)	8,090	18,300	32,900	--	--	8,090	18,300	32,900	--	--
		750 (51.70)	12,000	23,600	--	--	--	12,000	27,200	--	--	--
		1,000 (69.0)	16,000	--	--	--	--	16,000	--	--	--	--
		1,250 (86.20)	--	--	--	--	--	--	--	--	--	--
		1,500 (103.00)	--	--	--	--	--	--	--	--	--	--
		1,750 (121.00)	--	--	--	--	--	--	--	--	--	--
		2,000 (138.00)	--	--	--	--	--	--	--	--	--	--
15 to 40 psig (1.0 to 2.8 bar) Green Spring	40 (2.8)	60 (4.10)	1,090	2,530	4,510	9,290	9,420	1,090	2,530	4,370	8,680	13,300
		75 (5.20)	1,370	3,080	5,640	10,800	16,500	1,370	3,080	5,540	11,900	19,300
		100 (6.90)	1,790	4,070	7,310	14,700	21,900	1,800	4,070	7,310	16,200	25,400
		150 (10.30)	2,580	5,850	10,500	20,500	34,500	2,580	5,850	10,500	23,300	41,300
		200 (13.80)	3,370	7,630	13,700	27,100	46,400	3,370	7,630	13,700	30,400	53,900
		300 (20.70)	4,910	11,200	20,100	40,100	67,100	4,910	11,200	20,100	44,600	46,000
		500 (34.50)	8,090	18,300	32,900	63,900	--	8,090	18,300	32,900	22,000	--
		750 (51.70)	12,000	27,200	39,400	--	--	12,000	27,200	28,000	--	--
		1,000 (69.0)	16,000	36,100	--	--	--	16,000	36,100	--	--	--
		1,250 (86.20)	19,000	--	--	--	--	19,000	--	--	--	--
		1,500 (103.00)	22,000	--	--	--	--	22,000	--	--	--	--
		1,750 (121.00)	--	--	--	--	--	--	--	--	--	--
		2,000 (138.00)	--	--	--	--	--	--	--	--	--	--

2. For pressure setting under 10 psig (0.69 bar) limit the input pressure to 100 psig (6.9 bar) to obtain the setpoint

3. For 5 psig (0.34 bar) pressure set point, the droop is 2 psig (0.14 bar)

• Capacity is based on 20 percent droop unless otherwise noted below

• "--" 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 0.775 and divide by the square root of the specific gravity of the desired gas

• To convert SCFH to m³/hr multiply by 0.0268

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CAPACITIES OF 0.6 S.G. NATURAL GAS IN SCFH *CONTINUED*

RG20

OUTLET PRESSURE RANGE	OUTLET PRESSURE PSIG (bar)	INLET PRESSURE, PSIG (bar)	Orifice Diameter, Inches (mm)									
			1" Body Size					2" Body Size				
			0.125"	0.188"	0.25"	0.375"	0.50"	0.125"	0.188"	0.25"	0.375"	0.50"
35 to 80 psig (2.4 to 5.5 bar) Blue Spring	60 (4.1)	75 (5.20)	1,230	2,760	4,880	8,630	16,100	1,260	2,760	4,900	9,000	12,300
		100 (6.90)	1,740	4,010	7,000	13,000	19,300	1,740	4,010	7,000	15,000	20,400
		150 (10.30)	2,580	5,850	10,500	18,900	32,800	2,580	5,850	10,500	23,300	35,200
		200 (13.80)	3,370	7,630	13,700	24,000	42,200	3,370	7,630	13,700	30,400	53,900
		300 (20.70)	4,910	11,200	20,100	32,500	69,100	4,910	11,200	20,100	44,600	79,000
		500 (34.50)	8,090	18,300	32,900	64,000	94,300	8,090	18,300	32,900	73,000	38,800
		750 (51.70)	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 (86.20)	19,000	45,000	57,000	--	--	19,000	45,000	70,000	--	--
		1,500 (103.00)	22,000	54,000	63,000	--	--	22,000	54,000	43,000	--	--
		1,750 (121.00)	25,000	63,000	--	--	--	25,000	26,000	--	--	--
		2,000 (138.00)	28,000	--	--	--	--	28,000	--	--	--	--
	80 (5.5)	100 (6.90)	1,630	3,750	6,650	12,200	18,600	1,630	3,750	6,400	12,800	20,400
		150 (10.30)	2,580	5,850	10,500	21,100	33,600	2,580	5,850	10,500	23,300	41,300
		200 (13.80)	3,370	7,630	13,700	28,400	44,100	3,370	7,630	13,700	30,400	53,900
		300 (20.70)	4,910	11,200	20,100	43,300	75,400	4,910	11,200	20,100	44,600	79,000
		500 (34.50)	8,090	18,300	32,900	71,600	110,000	8,090	18,300	32,900	73,000	48,000
		750 (51.70)	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 (86.20)	19,000	45,000	80,000	--	--	19,000	45,000	63,000	--	--
		1,500 (103.00)	22,000	54,000	96,000	--	--	22,000	54,000	86,000	--	--
		1,750 (121.00)	25,000	63,000	--	--	--	25,000	63,000	--	--	--
		2,000 (138.00)	28,000	--	--	--	--	28,000	--	--	--	--
70 to 150 psig (4.8 to 10.3 bar) Red Spring	100 (6.9)	150 (10.30)	2,510	5,540	8,710	16,000	24,000	2,510	5,540	8,600	16,000	22,000
		200 (13.80)	3,370	7,630	12,000	21,300	34,100	3,370	7,630	13,700	22,000	33,000
		300 (20.70)	4,910	11,200	19,400	30,100	53,200	4,910	11,200	20,100	35,000	65,300
		500 (34.50)	8,090	18,300	31,800	66,500	83,900	8,090	18,300	32,900	73,000	129,000
		750 (51.70)	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 (86.20)	19,000	45,000	72,000	114,000	--	19,000	45,000	80,000	110,000	--
		1,500 (103.00)	22,000	54,000	86,000	--	--	22,000	54,000	96,000	--	--
		1,750 (121.00)	25,000	63,000	95,000	--	--	25,000	63,000	112,000	--	--
		2,000 (138.00)	28,000	71,000	--	--	--	28,000	71,000	--	--	--
	125 (8.6)	150 (10.30)	2,340	5,340	9,470	15,700	20,800	2,340	5,340	8,600	16,000	24,000
		200 (13.80)	3,320	7,550	13,400	28,100	32,800	3,320	7,550	13,700	24,000	36,000
		300 (20.70)	4,910	11,200	20,100	36,300	52,600	4,910	11,200	20,100	39,000	65,300
		500 (34.50)	8,090	18,300	32,900	70,800	109,000	8,090	18,300	32,900	73,000	129,000
		750 (51.70)	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 (86.20)	19,000	45,000	80,000	145,000	--	19,000	45,000	80,000	75,000	--
		1,500 (103.00)	22,000	54,000	96,000	--	--	22,000	54,000	96,000	--	--
		1,750 (121.00)	25,000	63,000	112,000	--	--	25,000	63,000	112,000	--	--
		2,000 (138.00)	28,000	71,000	--	--	--	28,000	71,000	--	--	--
	150 (10.3)	200 (13.80)	3,200	7,290	12,900	21,400	33,600	3,200	7,290	13,000	24,000	38,000
		300 (20.70)	4,910	11,200	17,200	40,100	55,900	4,910	11,200	20,100	44,600	64,200
		500 (34.50)	8,090	18,300	32,900	70,300	111,000	8,090	18,300	32,900	73,000	129,000
		750 (51.70)	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 (86.20)	19,000	45,000	80,000	150,000	--	19,000	45,000	80,000	81,000	--
		1,500 (103.00)	22,000	54,000	96,000	--	--	22,000	54,000	96,000	--	--
		1,750 (121.00)	25,000	63,000	112,000	--	--	25,000	63,000	112,000	--	--
		2,000 (138.00)	28,000	71,000	--	--	--	28,000	71,000	--	--	--

-Capacity is based on 20 percent droop unless otherwise noted below.

-“--” areas indicate that the inlet pressure is too high for a given orifice size.

-To convert capacities to another gas, multiply by .775 and divide by the square root of the specific gravity of the desired gas.

-To convert SCFH to m³/hr multiply by 0.0268

CAPACITIES OF 0.6 S.G. NATURAL GAS IN SCFH

RG20R

OUTLET PRESSURE RANGE	OUTLET PRESSURE PSIG (bar)	INLET PRESSURE, PSIG (bar)	Orifice Diameter, Inches (mm)									
			1" Body Size					2" Body Size				
			0.125"	0.188"	0.25"	0.375"	0.50"	0.125"	0.188"	0.25"	0.375"	0.50"
5 to 20 psig ² (0.34 to 1.4 bar) Yellow Spring	5 ³ (0.34)	10 (0.69)	330	710	1,100	1,900	2,500	330	710	1,080	1,700	2,400
		15 (1.00)	390	890	1,600	2,500	3,350	390	890	1,250	1,900	2,700
		20 (1.40)	500	1,160	2,060	3,400	4,450	500	1,160	1,900	2,650	3,900
		30 (2.10)	670	1,560	2,800	4,750	6,900	670	1,560	2,800	3,680	6,500
		60 (4.10)	1,170	2,600	4,710	8,140	13,700	1,170	2,600	4,750	7,250	17,800
		75 (5.20)	1,410	3,150	5,710	9,790	14,500	1,410	3,150	5,700	8,060	22,400
		100 (6.90)	1,800	4,070	7,310	12,500	16,000	1,790	4,070	7,310	16,200	28,700
	10 (0.69)	15 (1.03)	375	880	1,590	2,480	3,300	375	880	1,220	1,860	2,670
		20 (1.40)	490	1,150	2,050	3,380	4,410	490	1,150	1,880	2,610	3,830
		30 (2.10)	670	1,560	2,800	4,720	6,840	670	1,560	2,760	3,640	6,460
		60 (4.10)	1,170	2,600	4,710	8,140	13,700	1,170	2,600	4,750	7,250	17,800
		75 (5.20)	1,410	3,150	5,710	9,790	14,500	1,410	3,150	5,700	8,060	22,400
		100 (6.90)	1,800	4,070	7,310	12,500	16,000	1,790	4,070	7,310	16,200	28,700
		150 (10.30)	2,580	5,850	10,500	17,000	18,000	2,580	5,850	10,500	23,300	25,900
		200 (13.80)	3,370	7,630	13,700	18,000	18,500	3,370	7,630	13,700	22,700	24,000
		300 (20.70)	4,910	11,200	19,800	20,000	--	4,910	11,200	10,300	12,800	--
		500 (34.50)	8,090	15,700	20,000	--	--	8,090	18,300	21,000	--	--
		750 (51.70)	12,000	18,000	--	--	--	12,000	27,200	--	--	--
		1,000 (69.0)	14,000	--	--	--	--	16,000	--	--	--	--
		1,250 (86.20)	--	--	--	--	--	--	--	--	--	--
		1,500 (103.00)	--	--	--	--	--	--	--	--	--	--
		1,750 (121.00)	--	--	--	--	--	--	--	--	--	--
		2,000 (138.00)	--	--	--	--	--	--	--	--	--	--
	20 (1.4)	30 (2.10)	620	1,450	2,580	4,360	6,290	620	1,450	2,350	4,300	6,110
		50 (3.4)	1,000	2,280	4,090	7,870	14,100	1,000	2,280	4,040	7,100	12,800
		60 (4.10)	1,170	2,640	4,750	9,690	14,500	1,170	2,640	4,750	8,400	15,700
		100 (6.90)	1,800	4,070	7,310	13,900	23,300	1,800	4,070	7,310	16,200	28,700
		150 (10.30)	2,580	5,850	10,500	17,700	34,200	2,580	5,850	10,500	23,300	29,000
		200 (13.80)	3,370	7,630	13,700	26,600	39,100	3,370	7,630	13,700	24,000	33,000
		300 (20.70)	4,910	11,200	20,100	37,000	--	4,910	11,200	20,100	19,600	--
		500 (34.50)	8,090	18,300	32,900	--	--	8,090	18,300	32,900	--	--
		750 (51.70)	12,000	23,600	--	--	--	12,000	27,200	--	--	--
		1,000 (69.0)	16,000	--	--	--	--	16,000	--	--	--	--
		1,250 (86.20)	--	--	--	--	--	--	--	--	--	--
		1,500 (103.00)	--	--	--	--	--	--	--	--	--	--
		1,750 (121.00)	--	--	--	--	--	--	--	--	--	--
		2,000 (138.00)	--	--	--	--	--	--	--	--	--	--
15 to 40 psig (1.0 to 2.8 bar) Green Spring	40 (2.8)	60 (4.10)	1,090	2,530	4,510	9,290	9,420	1,090	2,530	4,370	8,680	13,300
		75 (5.20)	1,370	3,080	5,640	10,800	16,500	1,370	3,080	5,540	11,900	19,300
		100 (6.90)	1,790	4,070	7,310	14,700	21,900	1,800	4,070	7,310	16,200	25,400
		150 (10.30)	2,580	5,850	10,500	20,500	34,500	2,580	5,850	10,500	23,300	41,300
		200 (13.80)	3,370	7,630	13,700	27,100	46,400	3,370	7,630	13,700	30,400	53,900
		300 (20.70)	4,910	11,200	20,100	40,100	67,100	4,910	11,200	20,100	44,600	46,000
		500 (34.50)	8,090	18,300	32,900	63,900	--	8,090	18,300	32,900	22,000	--
		750 (51.70)	12,000	27,200	39,400	--	--	12,000	27,200	28,000	--	--
		1,000 (69.0)	16,000	36,100	--	--	--	16,000	36,100	--	--	--
		1,250 (86.20)	19,000	--	--	--	--	19,000	--	--	--	--
		1,500 (103.00)	21,000	--	--	--	--	22,000	--	--	--	--
		1,750 (121.00)	--	--	--	--	--	--	--	--	--	--
		2,000 (138.00)	--	--	--	--	--	--	--	--	--	--

2. For pressure setting under 10 psig (0.69 bar) limit the input pressure to 100 psig (6.9 bar) to obtain the setpoint

3. For 5 psig (0.34 bar) pressure set point, the droop is 2 psig (0.14 bar)

• Capacity is based on 20 percent droop unless otherwise noted below

• "--" 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 0.775 and divide by the square root of the specific gravity of the desired gas

• To convert SCFH to m³/hr multiply by 0.0268

CONTINUED ON NEXT PAGE

CAPACITIES OF 0.6 S.G. NATURAL GAS IN SCFH *CONTINUED*

RG20R

OUTLET PRESSURE RANGE	OUTLET PRESSURE PSIG (bar)	INLET PRESSURE, PSIG (bar)	Orifice Diameter, Inches (mm)									
			1" Body Size					2" Body Size				
			0.125"	0.188"	0.25"	0.375"	0.50"	0.125"	0.188"	0.25"	0.375"	0.50"
35 to 80 psig (2.4 to 5.5 bar) Blue Spring	60 (4.1)	75 (5.20)	1,230	2,760	4,880	8,630	16,100	1,260	2,760	4,900	9,000	12,300
		100 (6.90)	1,740	4,010	7,000	13,000	19,300	1,740	4,010	7,000	15,000	20,400
		150 (10.30)	2,580	5,850	10,500	18,900	32,800	2,580	5,850	10,500	23,300	35,200
		200 (13.80)	3,370	7,630	13,700	24,000	42,200	3,370	7,630	13,700	30,400	53,900
		300 (20.70)	4,910	11,200	20,100	32,500	69,100	4,910	11,200	20,100	44,600	79,000
		500 (34.50)	8,090	18,300	32,900	64,000	94,300	8,090	18,300	32,900	73,000	38,800
		750 (51.70)	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 (86.20)	19,000	45,000	57,000	--	--	19,000	45,000	70,000	--	--
		1,500 (103.00)	22,000	54,000	63,000	--	--	22,000	54,000	43,000	--	--
		1,750 (121.00)	25,000	63,000	--	--	--	25,000	26,000	--	--	--
		2,000 (138.00)	28,000	--	--	--	--	28,000	--	--	--	--
	80 (5.5)	100 (6.90)	1,630	3,750	6,650	12,200	18,600	1,630	3,750	6,400	12,800	20,400
		150 (10.30)	2,580	5,850	10,500	21,100	33,600	2,580	5,850	10,500	23,300	41,300
		200 (13.80)	3,370	7,630	13,700	28,400	44,100	3,370	7,630	13,700	30,400	53,900
		300 (20.70)	4,910	11,200	20,100	43,300	75,400	4,910	11,200	20,100	44,600	79,000
		500 (34.50)	8,090	18,300	32,900	71,600	110,000	8,090	18,300	32,900	73,000	48,000
		750 (51.70)	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 (86.20)	19,000	45,000	80,000	--	--	19,000	45,000	63,000	--	--
		1,500 (103.00)	22,000	54,000	96,000	--	--	22,000	54,000	86,000	--	--
		1,750 (121.00)	25,000	63,000	--	--	--	25,000	63,000	--	--	--
		2,000 (138.00)	28,000	--	--	--	--	28,000	--	--	--	--
70 to 150 psig (4.8 to 10.3 bar) Red Spring	100 (6.9)	150 (10.30)	2,510	5,540	8,710	16,000	24,000	2,510	5,540	8,600	16,000	22,000
		200 (13.80)	3,370	7,630	12,000	21,300	34,100	3,370	7,630	13,700	22,000	33,000
		300 (20.70)	4,910	11,200	19,400	30,100	53,200	4,910	11,200	20,100	35,000	65,300
		500 (34.50)	8,090	18,300	31,800	66,500	83,900	8,090	18,300	32,900	73,000	129,000
		750 (51.70)	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 (86.20)	19,000	45,000	72,000	114,000	--	19,000	45,000	80,000	110,000	--
		1,500 (103.00)	22,000	54,000	86,000	--	--	22,000	54,000	96,000	--	--
		1,750 (121.00)	25,000	63,000	95,000	--	--	25,000	63,000	112,000	--	--
		2,000 (138.00)	28,000	71,000	--	--	--	28,000	71,000	--	--	--
	125 (8.6)	150 (10.30)	2,340	5,340	9,470	15,700	20,800	2,340	5,340	8,600	16,000	24,000
		200 (13.80)	3,320	7,550	13,400	28,100	32,800	3,320	7,550	13,700	24,000	36,000
		300 (20.70)	4,910	11,200	20,100	36,300	52,600	4,910	11,200	20,100	39,000	65,300
		500 (34.50)	8,090	18,300	32,900	70,800	109,000	8,090	18,300	32,900	73,000	129,000
		750 (51.70)	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 (86.20)	19,000	45,000	80,000	145,000	--	19,000	45,000	80,000	75,000	--
		1,500 (103.00)	22,000	54,000	96,000	--	--	22,000	54,000	96,000	--	--
		1,750 (121.00)	25,000	63,000	112,000	--	--	25,000	63,000	112,000	--	--
		2,000 (138.00)	28,000	71,000	--	--	--	28,000	71,000	--	--	--
	150 (10.3)	200 (13.80)	3,200	7,290	12,900	21,400	33,600	3,200	7,290	13,000	24,000	38,000
		300 (20.70)	4,910	11,200	17,200	40,100	55,900	4,910	11,200	20,100	44,600	64,200
		500 (34.50)	8,090	18,300	32,900	70,300	111,000	8,090	18,300	32,900	73,000	129,000
		750 (51.70)	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 (86.20)	19,000	45,000	80,000	150,000	--	19,000	45,000	80,000	81,000	--
		1,500 (103.00)	22,000	54,000	96,000	--	--	22,000	54,000	96,000	--	--
		1,750 (121.00)	25,000	63,000	112,000	--	--	25,000	63,000	112,000	--	--
		2,000 (138.00)	28,000	71,000	--	--	--	28,000	71,000	--	--	--

-Capacity is based on 20 percent droop unless otherwise noted below.

-“--” areas indicate that the inlet pressure is too high for a given orifice size.

-To convert capacities to another gas, multiply by .775 and divide by the square root of the specific gravity of the desired gas.

-To convert SCFH to m³/hr multiply by 0.0268

CAPACITIES OF 0.6 S.G. NATURAL GAS IN SCFH

RG20H

OUTLET PRESSURE RANGE	OUTLET PRESSURE PSIG (bar)	INLET PRESSURE, PSIG (bar)	Orifice Diameter, Inches (mm)									
			1" Body Size					2" Body Size				
			0.125"	0.188"	0.25"	0.375"	0.50"	0.125"	0.188"	0.25"	0.375"	0.50"
140 to 250 psig (9.7 to 17.2 bar) Blue Spring RG20H Only	150 (10.3)	200 (13.80)	3,200	7,290	11,500	21,600	31,000	3,200	7,290	13,700	24,100	31,000
		250 (17.20)	4,100	9,200	15,400	28,600	40,000	4,100	9,200	16,100	28,600	40,000
		300 (20.70)	4,910	11,200	19,300	31,000	46,000	4,910	11,200	19,300	31,000	46,000
		400 (27.60)	6,500	14,800	25,000	40,000	50,000	6,500	14,800	25,000	40,000	50,000
		500 (34.50)	8,090	18,300	32,000	51,000	-	8,090	18,300	32,000	-	-
		750 (51.70)	12,000	27,200	46,000	-	-	12,000	27,200	48,000	-	-
		1,000 (69.00)	16,000	36,100	60,000	-	-	16,000	36,100	65,000	-	-
		1,250 (86.20)	19,000	45,000	-	-	-	19,000	45,000	-	-	-
		1,500 (103.00)	22,000	54,000	-	-	-	22,000	54,000	-	-	-
		1,750 (121.00)	25,000	63,000	-	-	-	25,000	63,000	-	-	-
		2,000 (138.00)	28,000	-	-	-	-	28,000	-	-	-	-
	200 (13.8)	250 (17.20)	3,850	8,400	15,000	31,000	41,000	3,850	8,400	16,100	33,000	41,000
		300 (20.70)	4,910	11,200	19,500	36,000	52,000	4,910	11,200	20,100	36,000	52,000
		400 (27.60)	6,500	14,800	26,500	52,000	68,000	6,500	14,800	26,500	52,000	68,000
		500 (34.50)	8,090	18,300	33,000	61,000	--	8,090	18,300	33,000	61,000	--
		750 (51.70)	12,000	27,200	49,000	--	--	12,000	27,200	49,000	--	--
		1,000 (69.00)	16,000	36,100	65,000	--	--	16,000	36,100	65,000	--	--
		1,250 (86.20)	19,000	45,000	--	--	--	19,000	45,000	--	--	--
		1,500 (103.00)	22,000	54,000	--	--	--	22,000	54,000	--	--	--
		1,750 (121.00)	25,000	63,000	--	--	--	25,000	63,000	--	--	--
		2,000 (138.00)	28,000	--	--	--	--	28,000	--	--	--	--
	250 (17.2)	300 (20.70)	4,500	9,900	18,500	37,000	75,000	4,500	9,900	18,500	37,000	75,000
		400 (27.60)	6,400	14,300	26,000	55,000	81,000	6,400	14,300	26,000	55,000	81,000
		500 (34.50)	8,090	18,300	33,000	64,000	95,000	8,090	18,300	33,000	64,000	95,000
		750 (51.70)	12,000	27,200	49,000	102,000	--	12,000	27,200	49,000	102,000	--
		1,000 (69.00)	16,000	36,100	65,000	--	--	16,000	36,100	65,000	--	--
		1,250 (86.20)	19,000	45,000	81,000	--	--	19,000	45,000	81,000	--	--
		1,500 (103.00)	22,000	54,000	--	--	--	22,000	54,000	--	--	--
		1,750 (121.00)	25,000	63,000	--	--	--	25,000	63,000	--	--	--
		2,000 (138.00)	28,000	71,000	--	--	--	28,000	71,000	--	--	--
240 to 500 psig (16.5 to 34.5 bar) Red Spring RG20H Only	250 (17.2)	300 (20.70)	4,500	9,900	18,500	37,000	75,000	4,500	9,900	18,500	37,000	75,000
		400 (27.60)	6,400	14,300	26,000	55,000	81,000	6,400	14,300	26,000	55,000	81,000
		500 (34.50)	8,090	18,300	33,000	64,000	95,000	8,090	18,300	33,000	64,000	95,000
		750 (51.70)	12,000	27,200	49,000	102,000	--	12,000	27,200	49,000	102,000	--
		1,000 (69.00)	16,000	36,100	65,000	--	--	16,000	36,100	65,000	--	--
		1,250 (86.20)	19,000	45,000	81,000	--	--	19,000	45,000	81,000	--	--
		1,500 (103.00)	22,000	54,000	--	--	--	22,000	54,000	--	--	--
		1,750 (121.00)	25,000	63,000	--	--	--	25,000	63,000	--	--	--
		2,000 (138.00)	28,000	71,000	--	--	--	28,000	71,000	--	--	--
	300 (20.7)	350 (24.10)	5,150	11,300	18,400	31,000	45,000	5,150	11,300	18,400	31,000	45,000
		400 (27.60)	6,200	13,700	23,400	40,000	52,000	6,200	13,700	23,400	40,000	52,000
		500 (34.50)	8,090	18,300	32,000	53,000	67,000	8,090	18,300	32,000	53,000	67,000
		750 (51.70)	12,000	27,200	48,000	80,000	--	12,000	27,200	48,000	80,000	--
		1,000 (69.00)	16,000	36,100	62,000	--	--	16,000	36,100	62,000	--	--
		1,250 (86.20)	19,000	45,000	79,000	--	--	19,000	45,000	79,000	--	--
		1,500 (103.00)	22,000	54,000	--	--	--	22,000	54,000	--	--	--
		1,750 (121.00)	25,000	63,000	--	--	--	25,000	63,000	--	--	--
		2,000 (138.00)	28,000	71,000	--	--	--	28,000	71,000	--	--	--

-Capacity is based on 20 percent droop unless otherwise noted below.

- "--" areas indicate that the inlet pressure is too high for a given orifice size.

-To convert capacities to another gas, multiply by .775 and divide by the square root of the specific gravity of the desired gas.

-To convert SCFH to m³/hr multiply by 0.0268

CONTINUED ON NEXT PAGE

CAPACITIES OF 0.6 S.G. NATURAL GAS IN SCFH

RG20H

OUTLET PRESSURE RANGE	OUTLET PRESSURE PSIG (bar)	INLET PRESSURE, PSIG (bar)	Orifice Diameter, Inches (mm)									
			1" Body Size					2" Body Size				
			0.125"	0.188"	0.25"	0.375"	0.50"	0.125"	0.188"	0.25"	0.375"	0.50"
240 to 500 psig (16.5 to 34.5 bar) Red Spring RG20H Only	400 (27.6)	450 (31.00)	6,400	14,000	25,000	47,000	67,000	6,400	14,000	25,000	47,000	67,000
		500 (34.50)	8,090	18,300	32,000	54,000	77,000	8,090	18,300	32,000	54,000	77,000
		750 (51.70)	12,000	27,200	49,000	91,000	-	12,000	27,200	49,000	91,000	-
		1,000 (69.00)	16,000	36,100	65,000	-	-	16,000	36,100	65,000	-	-
		1,250 (86.20)	19,000	45,000	81,000	-	-	19,000	45,000	81,000	-	-
		1,500 (103.00)	22,000	54,000	-	-	-	22,000	54,000	-	-	-
		1,750 (121.00)	25,000	63,000	-	-	-	25,000	63,000	-	-	-
		2,000 (138.00)	28,000	71,000	-	-	-	28,000	71,000	-	-	-
	500 (34.5)	550 (37.90)	7,700	16,800	33,000	62,000	90,000	7,700	16,800	33,000	62,000	90,000
		600 (47.40)	8,800	19,400	37,000	70,000	104,000	8,800	19,400	37,000	70,000	104,000
		750 (51.70)	12,000	27,200	49,000	88,000	140,000	12,000	27,200	49,000	88,000	140,000
		1,000 (69.00)	16,000	36,100	65,000	130,000	-	16,000	36,100	65,000	130,000	-
		1,250 (86.20)	19,000	45,000	81,000	-	-	19,000	45,000	81,000	-	-
		1,500 (103.00)	22,000	54,000	97,000	-	-	22,000	54,000	97,000	-	-
		1,750 (121.00)	25,000	63,000	-	-	-	25,000	63,000	-	-	-
		2,000 (138.00)	28,000	71,000	-	-	-	28,000	71,000	-	-	-

-Capacity is based on 20 percent droop unless otherwise noted below.

- "-" areas indicate that the inlet pressure is too high for a given orifice size.

-To convert capacities to another gas, multiply by .775 and divide by the square root of the specific gravity of the desired gas.

-To convert SCFH to m³/hr multiply by 0.0268

PRESSURE RANGES

OUTLET PRESSURERANGE	ORIFICE SIZE	Maximum Inlet Pressure (RG20 & RG20H)						Maximum Inlet Pressure (RG20R)					
		NYLON DISK		BUNA DISK		VITON DISK		NYLON DISK		BUNA DISK		VITON DISK	
		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
5 to 20 psig (0.34 to 1.4 bar)	.125"	1000	69	1000	69	300	20.7	1000	69	1000	69	300	20.7
	.188"	750	51.7	750	51.7	300	20.7	750	51.7	750	51.7	300	20.7
	.25"	500	34.5	500	34.5	300	20.7	500	34.5	500	34.5	300	20.7
	.375"	300	20.7	300	20.7	300	20.7	300	20.7	300	20.7	300	20.7
	.50"	250	17.2	250	17.2	250	17.2	200	13.8	200	13.8	200	13.8
15 to 40 psig (1.0 to 2.8 bar)	.125"	1500	103.4	1000	69	300	20.7	1500	103	1000	69	300	20.7
	.188"	1000	69	1000	69	300	20.7	1000	69	1000	69	300	20.7
	.25"	750	51.7	750	51.7	300	20.7	750	51.7	750	51.7	300	20.7
	.375"	500	34.5	500	34.5	300	20.7	300	20.7	300	20.7	300	20.7
	.50"	300	20.7	300	20.7	300	20.7	200	13.8	200	13.8	200	13.8
35 to 80 psig (2.4 to 5.5 bar)	.125"	2000	137.9	1000	69	300	20.7	1750	121	1000	69	300	20.7
	.188"	1750	120.7	1000	69	300	20.7	1000	69	1000	69	300	20.7
	.25"	1500	103.4	1000	69	300	20.7	750	51.7	750	51.7	300	20.7
	.375"	1000	69	1000	69	300	20.7	300	20.7	300	20.7	300	20.7
	.50"	750	51.7	750	51.7	300	20.7	200	13.8	200	13.8	200	13.8
70 to 150 psig (4.8 to 10.3 bar)	.125"	2000	137.9	1000	69	300	20.7	1000	69	1000	69	300	20.7
	.188"	2000	137.9	1000	69	300	20.7	500	34.5	500	34.5	300	20.7
	.25"	1750	120.7	1000	69	300	20.7	300	20.7	300	20.7	300	20.7
	.375"	1250	86.2	1000	69	300	20.7	200	13.8	200	13.8	200	13.8
	.50"	750	51.7	750	51.7	300	20.7	200	13.8	200	13.8	200	13.8
140 to 250 psig (9.7 to 17.2 bar)	.125"	2000	138	--	--	--	--	--	--	--	--	--	--
	.188"	1750	121	--	--	--	--	--	--	--	--	--	--
	.25"	1500	103	--	--	--	--	--	--	--	--	--	--
	.375"	1000	69	--	--	--	--	--	--	--	--	--	--
	.50"	750	51.7	--	--	--	--	--	--	--	--	--	--
240 to 500 psig (16.5 to 34.5 bar)	.125"	2000	138	--	--	--	--	--	--	--	--	--	--
	.188"	1750	121	--	--	--	--	--	--	--	--	--	--
	.25"	1500	103	--	--	--	--	--	--	--	--	--	--
	.375"	1000	69	--	--	--	--	--	--	--	--	--	--
	.50"	750	51.7	--	--	--	--	--	--	--	--	--	--

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

RG20R INTERNAL RELIEF PERFORMANCE

OUTLET PRESSURE RANGE	OUTLET PRESSURE SETTING PSIG (bar)	MAX DOWNSTREAM PRESSURE PSIG (bar)	Maximum Inlet Pressure to Keep Maximum Allowed Downstream System Pressure from Being Exceeded				
			Orifice Diameter, Inches (mm)				
			0.125"	0.188"	0.25"	0.375"	0.50"
5 to 20 psig ² (0.34 to 1.4 bar) Yellow Spring	10 (0.69)	60 (4.10)	740	320	190	95	75
		100 (6.90)	1,500	620	390	180	130
		125 (8.60)	1,900	830	480	220	160
		175 (12.10)	2,000	1,100	670	320	220
		200 (13.80)	2,000	1,300	770	360	260
		250 (17.20)	2,000	1,600	960	450	320
	15 (1.0)	60 (4.10)	620	260	170	90	70
		100 (6.90)	1,400	610	370	170	130
		125 (8.60)	1,900	810	480	220	160
		175 (12.10)	2,000	1,100	670	320	220
		200 (13.80)	2,000	1,300	770	360	260
		250 (17.20)	2,000	1,600	960	450	320
	20 (1.4)	60 (4.10)	490	210	130	80	65
		100 (6.90)	1,300	600	360	170	120
		125 (8.60)	1,800	800	480	220	160
		175 (12.10)	2,000	1,100	670	320	220
		200 (13.80)	2,000	1,300	770	360	260
		250 (17.20)	2,000	1,600	960	450	320
15 to 40 psig ² (1.0 to 2.8 bar) Green Spring	15 (1.0)	60 (4.10)	380	210	130	80	65
		100 (6.90)	1,300	590	350	170	120
		125 (8.60)	1,800	800	470	220	160
		175 (12.10)	2,000	1,100	640	320	220
		200 (13.80)	2,000	1,300	780	370	260
		250 (17.20)	2,000	1,600	960	450	320
	20 (1.4)	60 (4.10)	200	150	100	70	65
		100 (6.90)	1,200	550	330	160	120
		125 (8.60)	1,700	760	480	220	160
		175 (12.10)	2,000	1,100	670	320	220
		200 (13.80)	2,000	1,300	770	360	260
		250 (17.20)	2,000	1,600	960	450	320
	30 (2.1)	100 (6.90)	950	450	260	140	110
		125 (8.60)	1,500	670	400	190	150
		175 (12.10)	2,000	1,000	610	300	220
		200 (13.80)	2,000	1,200	760	360	260
		250 (17.20)	2,000	1,600	970	460	320
	40 (2.8)	100 (6.90)	700	330	200	120	108
		125 (8.60)	1,300	560	340	180	140
		175 (12.10)	1,800	1,000	550	290	220
		200 (13.80)	2,000	1,200	730	350	250
		250 (17.20)	2,000	1,600	970	460	320
35 to 80 psig (2.4 to 5.5 bar) Blue Spring	40 (2.8)	125 (8.60)	1,100	500	300	170	140
		150 (10.30)	1,600	750	440	230	180
		175 (12.10)	2,000	980	580	290	220
		200 (13.80)	2,000	1,200	720	340	250
		250 (17.20)	2,000	1,600	940	450	320
	50 (3.4)	100 (6.90)	820	400	230	150	140
		125 (8.60)	1,400	650	370	210	170
		175 (12.10)	1,900	700	530	270	210
		200 (13.80)	2,000	1,100	670	330	240
		250 (17.20)	2,000	1,500	920	430	320
	70 (4.8)	150 (10.30)	850	430	250	170	160
		175 (12.10)	1,400	670	400	230	190
		200 (13.80)	2,000	920	550	280	230
		250 (17.20)	2,000	1,300	830	400	310
		150 (10.30)	500	300	200	160	150
		175 (12.10)	1,200	550	330	210	190
		200 (13.80)	1,700	800	480	270	220
		250 (17.20)	2,000	1,200	770	390	300

Shaded areas indicate maximum inlet pressures allowed during system malfunction only. Tables on pages 2-7 gives the maximum inlet pressure for normal regulator.

CONTINUED ON NEXT PAGE

RG20R INTERNAL RELIEF PERFORMANCE *CONTINUED*

OUTLET PRESSURE RANGE	OUTLET PRESSURE SETTING PSIG (bar)	MAX DOWNSTREAM PRESSURE PSIG (bar)	Maximum Inlet Pressure to Keep Maximum Allowed Downstream System Pressure from Being Exceeded				
			Orifice Diameter, Inches (mm)				
			0.125"	0.188"	0.25"	0.375"	0.50"
70 to 150 psig (4.8 to 10.3 bar) Red Spring	70 (4.8)	175 (12.10)	600	400	260	200	175
		200 (13.80)	1,200	630	380	250	210
		250 (17.20)	2,000	1,100	680	360	290
	80 (5.5)	175 (12.10)	250	240	200	190	175
		200 (13.80)	960	520	330	240	210
		250 (17.20)	2,000	1,000	620	350	280
	100 (6.9)	200 (13.800)	250	240	230	210	210
		250 (17.20)	1,600	770	520	320	270
	125 (8.6)	100 (6.90)	1,000	500	390	290	260
	260	250 (17.20)	260	260	260	260	260

HOW TO ORDER

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

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

MODEL

RG20 - Standard Pressure (Springs 1-5)
RG20R - Self Relieving (Springs 1-5)

RG20H - High Pressure (Springs 6 & 7)¹

CONNECTION SIZE

1 - 1"

2 - 2"

CONNECTION

N - NPT

F - RFF

CLASS

50 - Threaded

10 - 150

30 - 300

60 - 600

TRIM MATERIAL

A - Aluminum (Buna Seat Only)

T - Stainless (NACE)

DIAPHRAGM MATERIAL

1 - Buna

2 - Viton® (NACE)

SEAL MATERIAL

V - Viton® (NACE)

B - Buna

N - Nylon (NACE)²

ORIFICE SIZE

2 - .125" (1/8")

3 - .188" (3/16")

4 - .25" (1/4")

6 - .375" (3/8")

8 - .50" (1/2")

OUTLET SPRING RANGE

1 - 5-20 psi

3 - 35-80 psi

5 - 10-95 psi

7 - 240-500 psi

2 - 15-40 psi

4 - 70-150 psi

6 - 140-250 psi

¹ RG20H requires SST and Nylon

² Nylon is only recommended for use with springs 3,4,6, and 7 (35-500 psi).

REPAIR KITS AVAILABLE

BEAUMONTMANUFACTURING.COM

PHONE: 409.225.5863

850 FANNIN STREET, BEAUMONT, TEXAS 77701

08/2026

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