

RG10 REGULATOR

The RG10 is a high pressure, direct, spring operated, pressure regulator. Its high pressure, heavy duty design makes it ideal for pressure regulation in the oil and natural gas industry. Typical applications include farm taps, first or second cut regulation, transmission to distribution and many other high pressure processes. It has a maximum inlet pressure of 1500 psi and an outlet range of 27-500 psi.

The RG10 also has the ability to be converted into a relief valve. A NACE option is available for sour service.

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:

- 0° F to 300° F (-18° C to 149° C) Viton
- -20° F to 180° F (-29° C to 82° C) Buna, Nylon, Neoprene

Body Pressure Rating:

- 1500 psi

Housing Pressure Rating:

- To prevent housing failure: 550 psi
- To prevent damage to internal parts: 200 psi above set point up to 550 psi max

Weight:

- 1" – 25 lbs.
- 2" – 30 lbs.

MATERIALS

Body:

- WCB Steel

Housing and Spring Cover:

- WCB Steel

Orifice, Disk Holder and Shuttle:

- Brass,
- Stainless (Optional)

Disk:

- Buna
- Viton®
- Nylon

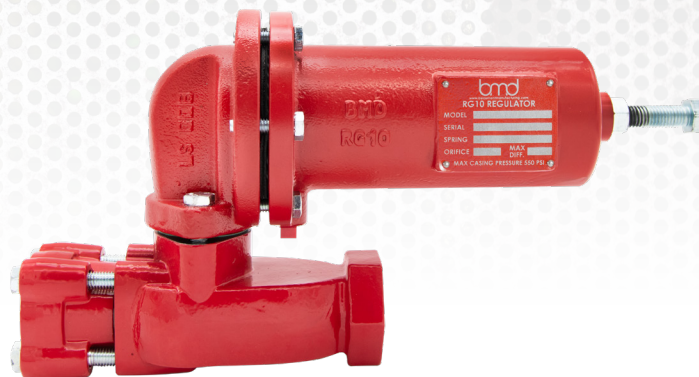
Diaphragm:

- Neoprene
- Viton® (Optional)

INLET PRESSURE

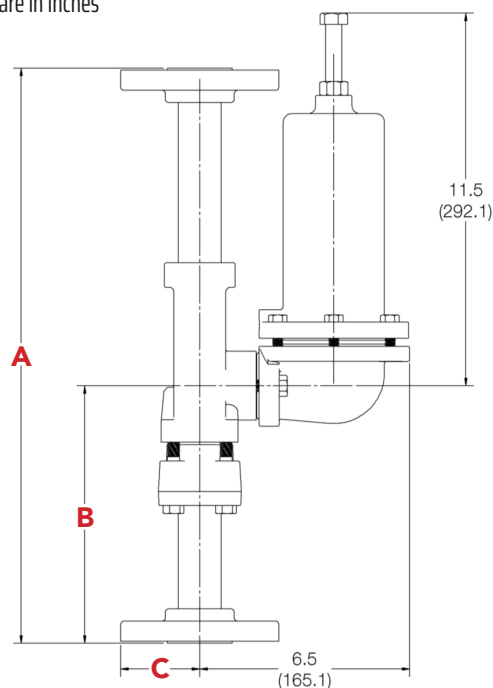
The inlet pressure should not exceed the sum of the regulator set point and the max pressure drop. *Example: For a 100 psi set point with a max pressure-drop of 750, the inlet pressure should be kept below 850 psi.*

Orifice Size	MAX INLET PRESSURE		Max Pressure Drop					
	psi	bar	Nylon Disk		Viton Disk		Buna Disk	
			psi	bar	psi	bar	psi	bar
0.125"	1500	103.4	1,500	103.4	200	13.8	600	41.4
0.188"	1500	103.4	1,500	103.4			600	41.4
0.25"	1500	103.4	1,000	69.0			600	41.4
0.375"	1000	69.0	500	34.5			500	34.5
0.50"	750	51.7	250	17.2			250	17.2



DIMENSIONS

Dimensions are in inches



VALVE SIZE	BODY SIZE	A	B	C
Threaded	1" Body	8.50	2.38	12.23
	2" Body	9.00	2.88	12.23
150 RFF	1" Body	12.06	3.75	13.37
	2" Body	12.19	3.75	13.37
300/600 RFF	1" Body	15.06	4.44	13.88
	2" Body	22.00	5.63	19.61

CAPACITIES OF 0.6 S.G. NATURAL GAS IN SCFH

OUTLET PRESSURE RANGE	OFFSET FROM SETPOINT 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"
27 to 50 psig (1.86 to 3.4 bar)	50 (3.4)	60 (4.10)	900	2,000	3,100	5,200	8,100	1,000	2,100	3,200	5,300	12,000
		75 (5.20)	1,300	2,800	3,800	7,200	10,000	1,400	2,900	3,900	7,300	16,000
		100 (6.90)	1,700	3,500	5,700	10,500	13,000	1,800	3,600	5,800	10,000	21,000
		150 (10.30)	2,600	5,700	8,700	13,000	17,000	2,700	5,800	9,000	15,000	36,000
		200 (13.80)	3,500	7,800	11,000	16,000	19,000	3,600	7,900	12,000	21,000	55,000
		300 (20.70)	5,300	10,500	14,000	20,000	23,000	5,500	11,000	19,000	48,000	83,000
		400 (27.60)	6,900	13,000	17,000	23,000	--	7,000	15,000	27,000	63,000	--
		550 (19.30)	9,600	16,000	20,000	26,000	--	9,700	21,000	38,000	88,000	--
		600 (41.40)	9,800	17,000	21,000	--	--	10,000	23,000	42,000	--	--
		1,050 (72.40)	17,000	23,000	27,000	--	--	19,000	42,000	74,000	--	--
46 to 95 psig (3.2 to 6.5 bar)	50 (3.4)	1,500 (103.00)	19,000	25,000	--	--	--	27,000	60,000	--	--	--
		60 (4.10)	800	1,500	2,400	4,300	6,400	900	1,600	2,500	4,400	7,300
		75 (5.20)	1,200	2,100	3,100	5,500	8,000	1,300	2,200	3,200	6,100	9,300
		100 (6.90)	1,500	3,100	4,200	7,500	10,000	1,600	3,400	4,300	7,600	12,000
		150 (10.30)	2,400	4,500	6,700	11,000	14,000	2,500	4,600	7,100	12,000	19,000
		200 (13.80)	3,400	6,600	9,400	14,000	17,000	3,500	6,700	9,600	16,000	27,000
		300 (20.70)	5,200	8,900	11,000	16,000	20,000	5,300	10,000	14,000	27,000	51,000
		400 (27.60)	6,800	11,000	15,000	20,000	--	6,900	13,000	21,000	46,000	--
		550 (19.30)	9,500	13,000	17,000	23,000	--	9,600	18,000	29,000	87,000	--
		600 (41.40)	9,800	14,000	19,000	--	--	10,000	20,000	35,000	--	--
	75 (5.2)	1,050 (72.40)	14,000	19,000	22,000	--	--	18,000	41,000	73,000	--	--
		1,500 (103.00)	18,000	24,000	--	--	--	26,000	59,000	--	--	--
		100 (6.90)	1,700	3,200	5,000	8,000	13,000	1,800	3,300	5,200	9,000	14,000
		125 (8.60)	2,200	4,300	6,700	10,000	15,000	2,300	4,400	6,900	11,000	18,000
		200 (5.20)	3,500	7,300	10,000	16,000	22,000	3,600	7,400	11,000	19,000	30,000
		250 (17.20)	4,400	9,400	13,000	19,000	24,000	4,500	9,500	14,000	26,000	44,000
		325 (22.40)	5,700	11,000	16,000	23,000	27,000	5,800	12,000	18,000	36,000	67,000
		400 (27.60)	7,100	14,000	19,000	27,000	--	7,200	15,000	24,000	47,000	--
		575 (39.60)	9,700	18,000	23,000	30,000	--	9,800	22,000	37,000	92,000	--
		600 (41.40)	9,900	19,000	25,000	--	--	10,000	23,000	39,000	--	--
		1,075 (74.10)	18,000	27,000	32,000	--	--	19,000	42,000	75,000	--	--
90 to 150 psig (6.2 to 10.3 bar)	100 (6.9)	1,500 (103.00)	23,000	32,000	--	--	--	24,000	60,000	--	--	--
		125 (8.60)	2,000	3,600	5,500	9,200	13,000	2,100	3,700	5,600	9,800	15,000
		150 (10.30)	2,500	4,600	6,800	11,000	16,000	2,600	4,900	7,400	12,000	18,000
		200 (5.20)	3,600	6,600	9,400	13,000	22,000	3,700	6,900	10,000	17,000	27,000
		250 (17.20)	4,400	8,500	11,000	18,000	26,000	4,500	8,700	13,000	22,000	34,000
		300 (20.70)	5,300	9,800	14,000	21,000	30,000	5,400	10,000	16,000	27,000	44,000
		350 (24.10)	6,100	10,000	16,000	25,000	32,000	6,300	12,000	19,000	33,000	57,000
		400 (27.60)	7,000	13,000	18,000	27,000	--	7,200	14,000	21,000	39,000	--
		600 (41.40)	9,500	18,000	23,000	35,000	--	10,000	21,000	34,000	69,000	--
		1,100 (75.80)	19,500	28,000	35,000	--	--	19,000	43,000	74,000	--	--
	125 (8.6)	1,500 (103.00)	25,000	35,000	--	--	--	27,000	59,000	--	--	--
		150 (10.30)	2,400	4,600	6,700	11,000	17,000	2,500	5,000	8,100	12,000	20,000
		200 (5.20)	3,500	6,800	10,000	15,000	23,000	3,600	7,400	11,000	19,000	30,000
		250 (17.20)	4,300	8,900	12,000	19,000	29,000	4,400	9,400	14,000	24,000	39,000
		300 (20.70)	5,200	10,000	15,000	25,000	34,000	5,300	11,000	17,000	31,000	48,000
		375 (25.90)	6,600	13,000	18,500	28,000	39,000	7,000	15,000	24,000	43,000	65,000
		400 (27.60)	7,300	14,500	19,000	29,000	--	8,300	18,000	28,000	56,000	--
		500 (34.50)	7,900	15,000	25,000	36,000	--	8,800	19,000	30,000	59,000	--
		625 (43.10)	10,000	22,000	29,000	41,000	--	11,000	24,000	40,000	79,000	--
		1,125 (77.60)	18,000	33,000	42,000	--	--	19,000	44,000	79,000	--	--
	150 (10.3)	1,500 (103.00)	26,000	43,000	--	--	--	27,000	60,000	--	--	--
		200 (13.80)	3,400	6,800	10,000	16,000	26,000	3,500	7,300	11,000	18,000	30,000
		250 (17.20)	4,400	8,800	13,000	20,000	32,000	4,500	9,500	15,000	26,000	38,000
		300 (20.70)	5,300	10,000	15,000	24,000	35,000	5,400	11,000	19,000	32,000	52,000
		400 (27.60)	7,100	14,000	22,000	34,000	42,000	7,200	15,000	26,000	46,000	77,000
		450 (31.00)	7,700	17,000	24,000	36,000	--	8,100	18,000	29,000	54,000	--
		650 (44.80)	9,000	24,000	33,000	49,000	--	10,000	25,000	44,000	88,000	--
		800 (55.20)	13,000	29,000	38,000	--	--	14,000	30,000	54,000	--	--
		1,150 (79.20)	20,000	38,000	49,000	--	--	21,000	46,000	78,000	--	--
		1,500 (103.00)	26,000	47,000	--	--	--	27,000	60,000	--	--	--

- 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

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

OUTLET PRESSURE RANGE	OFFSET FROM SETPOINT 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"
150 to 200 psig (10.3 to 13.8 bar)	150 (10.3)	200 (13.80)	3,400	6,200	9,300	16,000	24,000	3,500	6,900	10,000	17,000	28,000
		250 (17.20)	4,300	8,800	12,000	20,000	27,000	4,400	9,000	13,000	23,000	36,000
		300 (20.70)	5,300	10,000	15,000	24,000	30,000	5,400	11,000	17,000	28,000	47,000
		400 (27.60)	7,100	14,000	21,000	32,000	38,000	7,200	15,000	24,000	40,000	66,000
		450 (31.00)	7,600	15,000	24,000	36,000	--	8,000	17,000	27,000	46,000	--
		650 (44.80)	9,000	21,000	33,000	48,000	--	10,000	22,000	40,000	74,000	--
		800 (55.20)	13,000	27,000	37,000	--	--	14,000	30,000	51,000	--	--
		1,150 (79.30)	19,500	34,000	49,000	--	--	20,000	45,000	78,000	--	--
		1,500 (103.00)	26,000	44,000	--	--	--	27,000	60,000	--	--	--
	200 (13.8)	250 (17.20)	4,200	8,300	12,000	20,000	30,000	4,300	9,100	13,000	23,000	42,000
		300 (20.70)	5,200	10,000	16,000	25,000	35,000	5,300	11,000	18,000	33,000	52,000
		450 (31.00)	7,800	16,000	26,000	43,000	50,000	7,900	17,000	29,000	52,000	84,000
		600 (41.10)	9,500	22,000	34,000	55,000	--	10,000	23,000	40,000	75,000	--
		700 (48.30)	11,000	25,000	40,000	61,000	--	12,000	27,000	47,000	90,000	--
		800 (55.20)	13,000	30,000	43,000	--	--	14,000	31,000	54,000	--	--
		1,000 (68.90)	16,000	37,000	50,000	--	--	17,000	39,000	69,000	--	--
		1,200 (82.70)	20,000	41,000	59,000	--	--	21,000	48,000	83,000	--	--
		1,500 (103.00)	26,000	53,000	--	--	--	27,000	60,000	--	--	--
200 to 275 psig (13.8 to 19 bar)	200 (13.8)	250 (17.20)	4,200	8,200	11,000	20,000	29,000	4,300	8,900	12,000	23,000	35,000
		300 (20.70)	5,200	10,000	14,500	25,000	35,000	5,300	11,000	18,000	31,000	46,000
		450 (31.00)	7,700	16,000	24,000	40,000	50,000	7,800	17,000	28,000	50,000	78,000
		600 (41.40)	9,500	22,000	31,000	51,000	--	10,000	23,000	38,000	70,000	--
		700 (48.30)	11,000	25,000	35,000	55,000	--	12,000	27,000	45,000	83,000	--
		800 (55.20)	13,000	29,000	42,000	--	--	14,000	31,000	52,000	--	--
		1,000 (68.90)	16,000	36,000	50,000	--	--	17,000	39,000	68,000	--	--
		1,200 (82.70)	19,000	41,000	55,000	--	--	20,000	46,000	83,000	--	--
		1,500 (103.00)	26,000	51,000	--	--	--	27,000	60,000	--	--	--
	250 (17.2)	300 (20.70)	4,900	9,000	15,000	28,000	42,000	5,000	10,000	17,000	30,000	52,000
		400 (27.60)	7,000	14,000	23,000	40,000	56,000	7,100	15,000	25,000	47,000	76,000
		500 (34.50)	8,500	18,000	29,000	51,000	65,000	8,600	19,000	34,000	62,000	103,000
		600 (41.40)	9,500	22,000	34,000	59,000	--	10,000	23,000	41,000	78,000	--
		750 (51.70)	12,500	28,000	44,000	69,000	--	13,000	29,000	51,000	106,000	--
		1,000 (68.90)	16,000	39,000	58,000	--	--	17,000	40,000	68,000	--	--
		1,200 (82.70)	21,000	49,000	69,000	--	--	22,000	50,000	87,000	--	--
		1,500 (103.00)	26,000	59,000	--	--	--	27,000	60,000	--	--	--
	275 (19)	300 (20.70)	4,700	9,000	15,000	28,000	39,000	4,800	10,000	17,000	29,000	43,000
		400 (27.60)	6,900	14,000	25,000	40,000	54,000	7,000	15,000	26,000	47,000	73,000
		525 (36.20)	8,600	18,000	35,000	68,000	94,000	9,200	20,000	36,000	69,000	112,000
		775 (53.40)	11,000	28,000	51,000	95,000	--	12,000	30,000	52,000	112,000	--
		1,000 (68.90)	16,000	39,000	67,000	--	--	17,000	40,000	68,000	--	--
		1,275 (89.90)	21,000	50,000	87,000	--	--	22,000	51,000	89,000	--	--
		1,500 (103.00)	26,000	60,000	--	--	--	26,000	61,000	--	--	--
275 to 500 psig (19 to 34.5 bar)	275 (19)	300 (20.7)	4,500	7,500	10,000	20,000	31,000	4,600	8,400	13,000	23,000	37,000
		400 (27.6)	6,600	12,000	16,000	31,000	43,000	7,000	13,000	20,000	32,000	53,000
		525 (36.2)	8,600	16,000	21,000	39,000	56,000	9,300	18,000	27,000	46,000	73,000
		775 (53.4)	11,000	24,000	32,000	55,000	--	13,000	28,000	44,000	73,000	--
		1,000 (68.9)	17,000	32,000	43,000	--	--	18,000	37,000	57,000	--	--
		1,275 (87.9)	21,000	40,000	53,000	--	--	22,000	48,000	77,000	--	--
		1,500 (103)	26,000	46,000	--	--	--	27,000	57,000	--	--	--
	300 (20.7)	400 (27.60)	6,600	11,000	16,000	31,000	42,000	7,000	13,000	21,000	35,000	54,000
		550 (38.00)	9,700	18,000	23,000	44,000	63,000	9,800	20,000	30,000	52,000	78,000
		600 (41.40)	9,900	19,000	26,000	48,000	--	10,000	21,000	34,000	59,000	--
		700 (48.30)	11,000	23,000	30,000	54,000	--	12,000	26,000	40,000	72,000	--
		800 (55.20)	13,000	26,000	35,000	61,000	--	14,000	29,000	47,000	81,000	--
		900 (62.10)	15,000	29,000	39,000	--	--	16,000	34,000	53,000	--	--
		1,300 (90.00)	22,000	43,000	58,000	--	--	23,000	50,000	80,000	--	--
		1,500 (103.00)	26,000	49,000	--	--	--	27,000	58,000	--	--	--

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- 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

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

OUTLET PRESSURE RANGE	OFFSET FROM SETPOINT 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"
275 to 500 psig (19 to 34.5 bar)	400 (27.6)	500 (34.50)	8,300	16,000	24,000	44,000	62,000	8,800	17,000	28,000	49,000	77,000
		600 (41.40)	10,000	24,000	33,000	61,000	86,000	11,000	25,000	40,000	75,000	112,000
		800 (55.20)	13,000	30,000	41,000	76,000	--	14,000	31,000	51,000	95,000	--
		900 (62.10)	15,000	34,000	49,000	85,000	--	16,000	36,000	58,000	110,000	--
		1,000 (68.90)	17,000	38,000	54,000	--	--	18,000	40,000	66,000	--	--
		1,200 (82.70)	20,000	46,000	63,000	--	--	21,000	48,000	80,000	--	--
		1,400 (96.50)	24,000	55,000	76,000	--	--	25,000	57,000	96,000	--	--
		1,500 (103.00)	26,000	60,000	--	--	--	27,000	61,000	--	--	--
	500 (34.5)	500 (34.50)	8,700	16,000	26,000	50,000	77,000	9,000	18,000	30,000	53,000	89,000
		750 (51.70)	12,000	28,000	40,000	78,000	100,000	13,000	29,000	48,000	90,000	141,000
		900 (62.10)	15,000	34,000	52,000	92,000	--	16,000	35,000	60,000	113,000	--
		1,000 (68.90)	17,000	39,000	60,000	100,000	--	18,000	40,000	67,000	130,000	--
		1,500 (103.00)	26,000	59,000	72,000	--	--	27,000	60,000	82,000	--	--

HOW TO ORDER

EXAMPLE MODEL NO. **RG10-2N50-B1N6-6**

RG10 Series Regulator, 2" Body, Threaded Ends, Brass Trim, Neoprene Diaphragm, Nylon Seat, .375" Orifice, 275-500 psi

RG10 - 2 N 50 - B 1 N 6 - 6
SERIES

CONNECTION SIZE		1 - 1"		2 - 2"	
CONNECTION TYPE		N - NPT		F - RFF	
CLASS		50 - Threaded	10 - 150	30 - 300	60 - 600
TRIM MATERIAL		B - Brass		T - Stainless (NACE)	
DIAPHRAGM MATERIAL		1 - Neoprene (Standard/NACE)		2 - Viton® (Optional)	
SEAL MATERIAL*		V - Viton® (NACE)	B - Buna	N - Nylon (NACE)	
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 - 27-50 psi	3 - 90-150 psi	5 - 200-275 psi	
		2 - 46-95 psi	4 - 150-200 psi	6 - 275-500 psi	

*Viton & Buna are only recommended for use with spring 1-4. Nylon is only recommended for use with springs 5 & 6 (200-500 psi).

REPAIR KITS AVAILABLE

BEAUMONTMANUFACTURING.COM

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08/2026

