

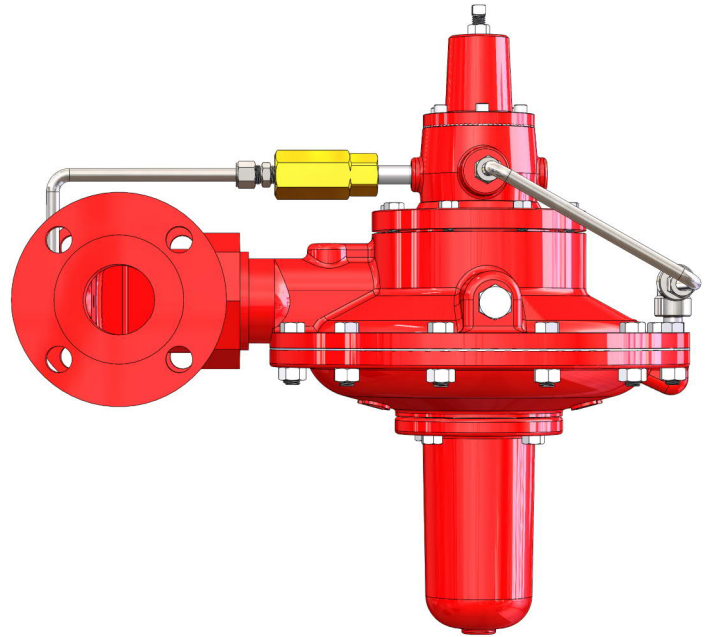


and Distribution Company

www.beaumontmanufacturing.com

RG50 Regulator

The RG50 is a pressure reducing regulator with a wide variety of applications such as natural gas distribution systems, boilers, furnaces, and much more. The RG50 provides high accuracy, no atmospheric bleed, and a heavy main spring that provides a tight shutoff. With high-capacity pressure control and excellent low flow control, topped off with ease of maintenance, the RG50 is the perfect solution for pressure reducing applications.



Specifications

Sizes: 2"

Connection: Female NPT, Flanged

Body Type: Globe

Port Sizes: 7/8", 1 1/8"

Maximum Inlet Pressure:

7/8" Orifice - 400 psi

1-1/8" Orifice - 300 psi

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

Set Pressure Range: 35 to 100 psi

Maximum Actuator Pressures:

Operating: 100 psi

Emergency: 110 psi

Maximum Pilot Spring Case Pressure for Pressure Loading:

100 psi

Maximum Rated Travel: 1/4 in/ 6.4 mm

Weight: 115lbs

Proportional Band: 1 to 2 psi In. W.C.

Materials:

Body: Cast Iron

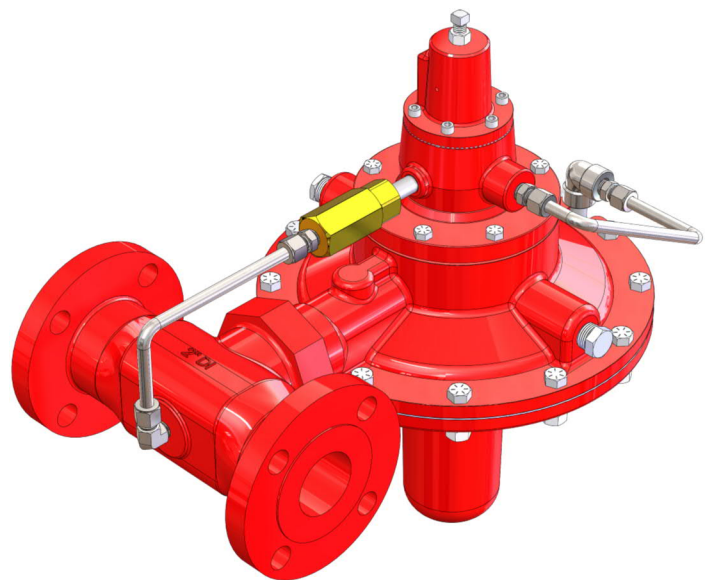
Actuator Casing: Cast Iron

Pilot Body and Spring Case: Cast Iron

Orifice, Disk Holder and Shuttle: Brass

Disk: Buna, Viton®, Nylon

Diaphragm: Neoprene, Viton® (Optional)



Body Pressure Ratings	
NPT	600 psi
150 Class Flange	250 psi
300 Class Flange	640 psi

Maximum Allowable Pressure Drop and Minimum Differential Pressures

Maximum Allowable Pressure Drop		Minimum Differential Pressure for Full Stroke		Disk Material	Maximum Orifice Size
psig	bar	psig	bar		In.
150	10.3	3	0.21	Buna and Viton	1 1/8"
250	17.2	3	0.21	Buna and Viton	7/8"
300	20.7	10	0.69	Nylon	1 1/8"
400	27.6	10	0.69	Nylon	7/8"

Capacities of 0.6 S.G. Natural Gas in SCFH

Orifice Size		Inlet Pressure		Outlet Pressure, psig/bar															
				35 / 2.4		40 / 2.8		45 / 3.1		50 / 3.5		60 / 4.1		75 / 5.2		100 / 6.9			
In.	mm	psig	bar	SCFH	Nm³/h	SCFH	Nm³/h	SCFH	Nm³/h	SCFH	Nm³/h	SCFH	Nm³/h	SCFH	Nm³/h	SCFH	Nm³/h		
7/8	22	40	2.8	14.4	0.4														
		50	3.4	25	0.7	21	0.6	15.5	0.4										
		60	4.1	35	0.9	30	0.8	27	0.7	23	0.6								
		75	5.2	47	1.3	45	1.2	41	1.1	37	1.0	30	0.8						
		100	6.9	59	1.6	59	1.6	59	1.6	59	1.6	53	1.4	44	1.2				
		125	8.6	73	2.0	73	2.0	73	2.0	73	2.0	73	2.0	66	1.8	48	1.3		
		150	10.3	86	2.3	86	2.3	86	2.3	86	2.3	86	2.3	86	2.3	72	1.9		
		175	12.1	96	2.6	96	2.6	96	2.6	96	2.6	96	2.6	96	2.6	93	2.5		
		200	13.8	108	2.9	108	2.9	108	2.9	108	2.9	108	2.9	108	2.9	108	2.9		
		225	15.5	123	3.3	123	3.3	123	3.3	123	3.3	123	3.3	123	3.3	123	3.3		
		250	17.2	132	3.5	132	3.5	132	3.5	132	3.5	132	3.5	132	3.5	132	3.5		
		300	20.7	162	4.3	162	4.3	162	4.3	162	4.3	162	4.3	162	4.3	162	4.3		
		350	24.1	188	5.0	188	5.0	188	5.0	188	5.0	188	5.0	188	5.0	188	5.0		
		400	27.6	215	5.8	215	5.8	215	5.8	215	5.8	215	5.8	215	5.8	215	5.8		
1-1/8	29	40	2.8	24	0.6														
		50	3.4	42	1.1	35	0.9	26	0.7										
		60	4.2	58	1.6	50	1.3	45	1.2	38	1.0								
		75	5.2	78	2.1	74	2.0	68	1.8	60	0.9	50	1.3						
		100	6.9	99	2.7	99	2.7	99	2.7	99	2.7	99	2.7	88	2.4				
		125	8.6	122	3.3	122	3.3	122	3.3	122	3.3	122	3.3	122	3.3	80	2.1		
		150	10.3	143	3.8	143	3.8	143	3.8	143	3.8	143	3.8	143	3.8	120	3.2		
		175	12.1	160	4.3	160	4.3	160	4.3	160	4.3	160	4.3	160	4.3	155	4.2		
		200	13.8	180	4.8	180	4.8	180	4.8	180	4.8	180	4.8	180	4.8	180	4.8		
		225	15.5	205	5.5	205	5.5	205	5.5	205	5.5	205	5.5	205	5.5	205	5.5		
		250	17.2	220	5.9	220	5.9	220	5.9	220	5.9	220	5.9	220	5.9	220	5.9		
		300	20.7	265	7.1	265	7.1	265	7.1	265	7.1	265	7.1	265	7.1	265	7.1		

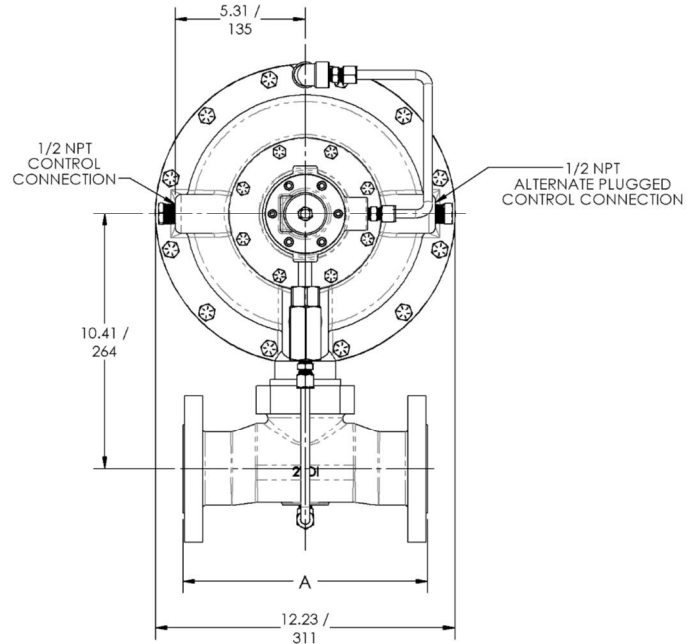
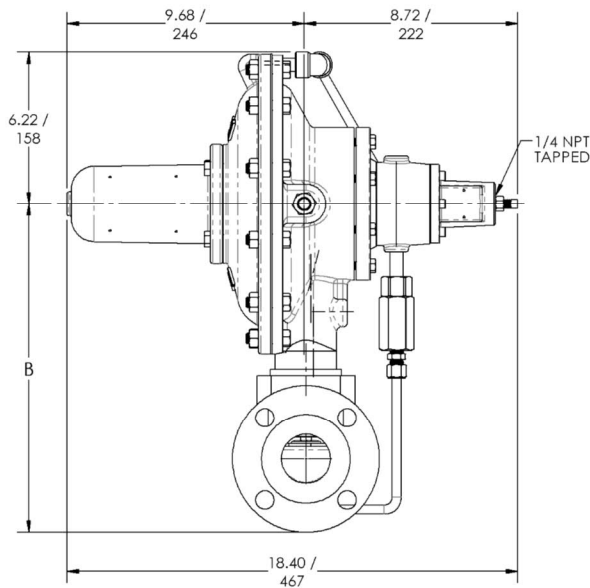
Grayed out areas indicate that the inlet pressure is too high for a given orifice size.

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

Dimensions

Dimensions in inches/mm.



Dimensions		
Body	A	B
NPT	6.25"	12.28"
Class 150	10.00"	13.41"
Class 300	10.50"	13.66"

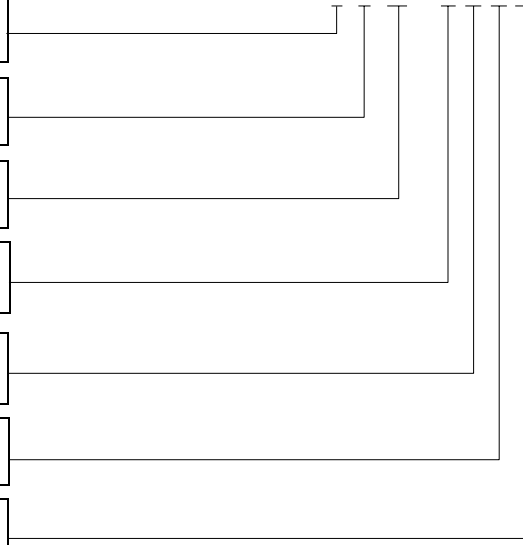
How to Order

Example Model No. **RG50-2N50-B1N7**

RG50 Series Regulator, 2" Body, Threaded Ends, Brass Trim with Nylon Seat, Neoprene Diaphragm, 7/8" Port

Connection Size 2 - 2"
Connection Type N - NPT F - RFF
Class 50 - Threaded 10 - 150 30 - 300
Trim Material B - Brass
Diaphragm Material 1 - Neoprene 2 - Viton
Seal Material * V - Viton® B - Buna N - Nylon
Port Size 7 - 7/8" 9 - 1 1/8"

RG50 - 2 N 50 - B 1 N 7



Repair kits available.

Beaumont Manufacturing
bmd
and Distribution Company
www.beaumontmanufacturing.com

Phone: 409-225-5863
Fax: 409-242-1005
850 Fannin
Beaumont, Texas 77701