



# NGR02 Series

**PRESSURE REDUCING REGULATORS**  
for Residential, Commercial or Industrial Applications



The NGR02 Series spring loaded gas regulators with internal relief provide consistent and controlled pressure in a variety of residential, industrial and commercial applications. The NGR02 meets ANSI Z21.80/CSA 6.22 for Class I, Class II, Vent Limiting and OPD (Overpressure Protection Device) applications and are designed to be used in many applications where non-corrosive dry gases are used.

## FEATURES

- Vent Limiting Option
- Internal Relief - OPD
- Outlet pressures up to 5 psig
- Conforms to ANSI B109.4
- Corrosion resistant exterior

## SPECIFICATIONS

Pipe Sizes:	1/2" to 1-1/4" NPT
Gas Types:	Natural Gas, LPG, other non-corrosive dry gases
Maximum Inlet Pressure:	10 to 125 psig per Orifice
Outlet Pressure Range:	2"w.c. to 5 psig
Maximum Emergency Inlet Pressure:	175 psig
Operating Temp:	-40F - +140F
Materials:	Housing: Epoxy Coated Aluminum Valve Body: Cast Iron Diaphragm/Valve Seat: Buna N Orifice: High Strength Brass

# NGR02 Series PRESSURE REDUCING REGULATORS

## 7" wc Outlet Pressure - BTU x1000 - 1" Pressure Drop

INLET PRESSURE	ORIFICE									
	1/8"		3/16"		1/4"		3/8"		1/2"	
	NG	LP	NG	LP	NG	LP	NG	LP	NG	LP
0.5	117	184	101	159	169	266	203	320	242	381
1	136	214	148	233	210	331	260	410	571	899
2	221	348	210	331	296	466	377	594	1039	1636
3	234	369	257	405	460	725	468	737	1429	2251
5	292	460	351	553	649	1022	1169	1841	1558	2454
10	338	532	545	858	1091	1718	1748	2753	1740	2741
15	390	614	701	1104	1481	2333	2104	3314		
20	491	773	818	1288	1870	2945	2403	3785		
30	619	975	1286	2025	2571	4049				
40	717	1129	2260	3560	3251	5120				
50	805	1268	2494	3928	3636	5727				
60	997	1570	2571	4049	4052	6382				
80	1403	2210	3696	5821						
100	1675	2638	4595	7237						
125	1850	2914	4812	7579						

Green S02A/1" VB to obtain values      NG = 0.63 S.G. gas = 1CF/1000BTU      LP = 1.53 S.G. gas = 1CF/2500BTU

## 14" wc Outlet Pressure - BTU x1000 - 2" Pressure Drop

INLET PRESSURE	ORIFICE									
	1/8"		3/16"		1/4"		3/8"		1/2"	
	NG	LP	NG	LP	NG	LP	NG	LP	NG	LP
1	156	246	94	148	187	295	285	449	584	920
2	182	287	156	246	292	460	325	512	1143	1800
3	265	417	195	307	374	589	792	1247	1688	2659
5	335	528	234	369	592	932	1562	2460	2013	3170
10	386	608	390	614	1083	1706	1792	2822	2338	3682
15	530	835	545	858	1535	2418	2208	3478		
20	600	945	623	981	2049	3227	2338	3682		
30	753	1186	1558	2454	2766	4356				
40	922	1452	2338	3682	3384	5330				
50	1052	1657	2435	3835	3701	5829				
60	1183	1863	2571	4049	3896	6136				
80	1403	2210	3790	5969						
100	1753	2761	4749	7480						
125	1900	2993	5214	8212						

Silver S02B/1" VB to obtain values      NG = 0.63 S.G. gas = 1CF/1000BTU      LP = 1.53 S.G. gas = 1CF/2500BTU

Relief & Lever Disconnect curves available upon request. Results in chart may vary for every application.

# NGR02 Series PRESSURE REDUCING REGULATORS

## 1 psig Outlet Pressure - BTU x1000 - 20% Pressure Drop

INLET PRESSURE	ORIFICE									
	1/8"		3/16"		1/4"		3/8"		1/2"	
	NG	LP	NG	LP	NG	LP	NG	LP	NG	LP
2	195	307	195	307	273	430	468	737	623	981
3	218	343	234	369	312	491	623	981	1013	1595
5	234	369	351	553	506	797	857	1350	1714	2700
10	358	564	545	858	779	1227	1870	2945	3117	4909
15	468	737	740	1166	1091	1718	2727	4295		
20	545	858	857	1350	1636	2577	3429	5401		
30	701	1104	1247	1964	2727	4295				
40	584	920	2260	3560	3740	5891				
50	701	1104	2338	3682	4519	7117				
60	779	1227	2649	4172	5143	8100				
80	1558	2454	3671	5782						
100	2104	3314	4570	7198						
125	2250	3544	5210	8206						

Silver S02B/1" VB to obtain values

NG = 0.63 S.G. gas = 1CF/1000BTU

LP = 1.53 S.G. gas = 1CF/2500BTU

## 2 psig Outlet Pressure - BTU x1000 - 20% Pressure Drop

INLET PRESSURE	ORIFICE									
	1/8"		3/16"		1/4"		3/8"		1/2"	
	NG	LP	NG	LP	NG	LP	NG	LP	NG	LP
3	187	295	179	282	234	369	351	553	429	676
5	265	417	257	405	390	614	545	858	1091	1718
10	358	564	390	614	623	981	1169	1841	2104	3314
15	468	737	545	858	935	1473	1714	2700		
20	545	858	701	1104	1403	2210	2416	3805		
30	701	1104	935	1473	2026	3191				
40	1013	1595	2026	3191	3117	4909				
50	1052	1657	2182	3437	3662	5768				
60	1130	1780	2260	3560	4442	6996				
80	1661	2616	3271	5152						
100	2150	3386	4110	6473						
125	2381	3750	5170	8143						

Yellow S02D/1" VB to obtain values

NG = 0.63 S.G. gas = 1CF/1000BTU

LP = 1.53 S.G. gas = 1CF/2500BTU

Relief & Lever Disconnect curves available upon request. Results in chart may vary for every application.

## 5 psig Outlet Pressure - BTU x1000 - 20% Pressure Drop

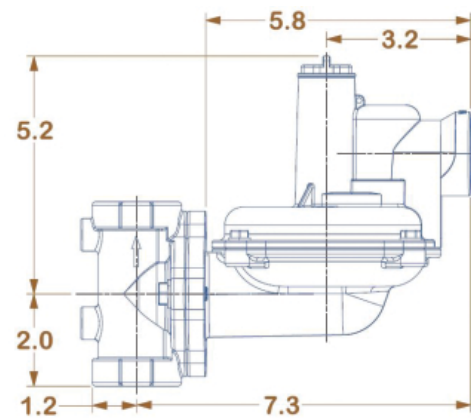
INLET PRESSURE	ORIFICE									
	1/8"		3/16"		1/4"		3/8"		1/2"	
	NG	LP	NG	LP	NG	LP	NG	LP	NG	LP
10	273	430	468	737	701	1104	1714	2700	2805	4418
15	351	553	655	1032	1169	1841	2494	3928		
20	390	614	779	1227	1792	2822	3039	4786		
30	468	737	1481	2333	2571	4049				
40	584	920	2338	3682	3662	5768				
50	662	1043	2455	3867	4364	6873				
60	825	1299	2494	3928	5065	7977				
80	1350	2126	3752	5909						
100	1467	2311	4673	7360						
125	1596	2514	5794	9126						

White S0204E/1" VB to obtain values      NG = 0.63 S.G. gas = 1CF/1000BTU      LP = 1.53 S.G. gas = 1CF/2500BTU

Relief & Lever Disconnect curves available upon request. Results in chart may vary for every application.

Orifice Max Pressure		
Size	Max Inlet Pressure	P/N
1/8"	125 psig	F02A
3/16"	125 psig	F02E
1/4"	60 psig	F02B
3/8"	20 psig	F02C
1/2"	10 psig	F02D

NGR02		
Pipe Size	Vent (NPT)	Wt. (lb)
1/2", 3/4", 1", 1-1/4"	1"	3.75



Spring Chart		
Color	Outlet Range	P/N
Orange	2"wc - 7"wc	S02F
Green	6.5"wc - 16"wc	S02A
Silver	14"wc - 1psig	S02B
Yellow/Black	26"wc - 1.5psig	S02C
Yellow	1psig - 3psig	S02D
White (HP)	2psig - 5psig	S0204E

Gas Type	Specific Gravity	Correction Factor (CF)
Natural Gas	0.60	1.00
Propane	1.53	0.63
Air	1.00	0.77
Propane-Air-Mix	1.20	0.71
Nitrogen	0.97	0.79
Butane	2.01	0.55
Carbon Dioxide (Dry)	1.52	0.63
Carbon Monoxide (Dry)	0.97	0.79