



## RRG Ratio Regulator - Gas

Hauck RRG regulators are carefully factory balanced to maintain a precise gas-air ratio for nozzle mix burners which use low pressure air and gas. When cross-connected to a control air line (see typical piping schematic), these regulators automatically proportion the gas delivery pressure in response to varying air pressure in the air control zone, enabling single valve firing control.

The proper operation of a cross-connected gas regulator requires that the gas supply pressure be equal to the sum of the maximum control air line pressure plus the gas pressure drop through the regulator at high fire. If the gas pressure is high enough, an air bleeder valve is not required. If the gas pressure is too low or the air pressure is too high, an air bleeder valve is required in the air control line.

A gas tight cock or valve should be installed upstream of the RRG regulator in the gas line.

### CAPACITIES

Model No.	Pipe Size (NPT)	Gas Capacity (CFH)
RRG 0707A	3/4	1,025
RRG 1010A	1	2,040
RRG 1515A	1	4,080
RRG 2020A	2	7,145
RRG 2525A	2 1/2	10,200
RRG 3030A	3	16,285
RRG 4040A	4 ANSI	28,620

- Notes:
1. Capacity based on 0.60 s.g. 60°F and 10" wc Δp.
  2. 2 psi maximum inlet pressure; special diaphragm for 5 psi inlet available – consult factory.
  3. Model No. with 'B' or 'D' suffix includes air bleeder valve.

### SELECTION

To select a regulator, determine the available pressure drop across the regulator (14"wc max) and CFH of gas flow at high fire. The capacity table allows direct selection based on a 10"wc pressure drop (recommended for optimum control) and .6 specific gravity (s.g.) gas. For pressure drop values other than 10"wc, refer to the pressure correction table for the correction factor.

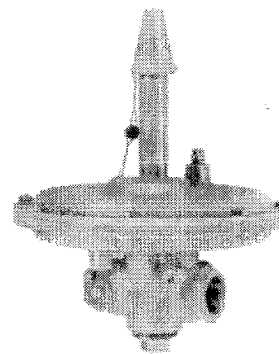


Fig.1 – RRG Ratio Regulator

Divide the required CFH by this factor. If gas is other than .60 s.g., refer to the specific gravity correction table for the appropriate correction factor. Divide the required CFH by this factor. In all cases, select the smallest regulator with a capacity greater than the calculated CFH Corrected Capacity.

### Flow Capacity Correction For Pressure

Regulator Δp "wc	4	6	8	10	12	14
Flow Capacity Factor	.632	.775	.895	1.0	1.09	1.18

### Flow Capacity Correction For Specific Gravity

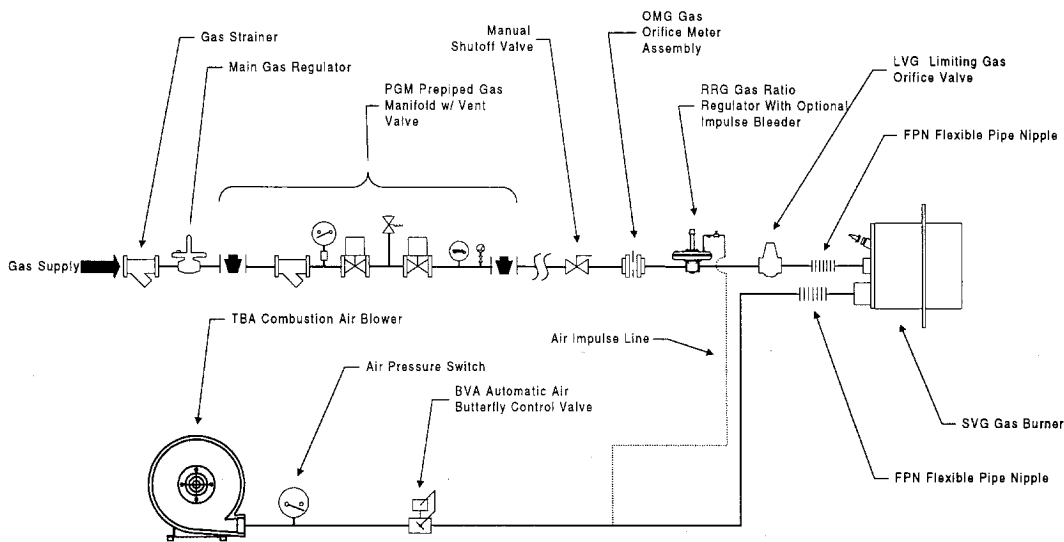
Specific Gravity	.40	.56	.60	1.0 Air	1.52	2.07
Flow Capacity Factor	1.23	1.03	1.0	.77	.63	.54

Note: Propane s.g.=1.52, Butane s.g. = 2.07

### FEATURES

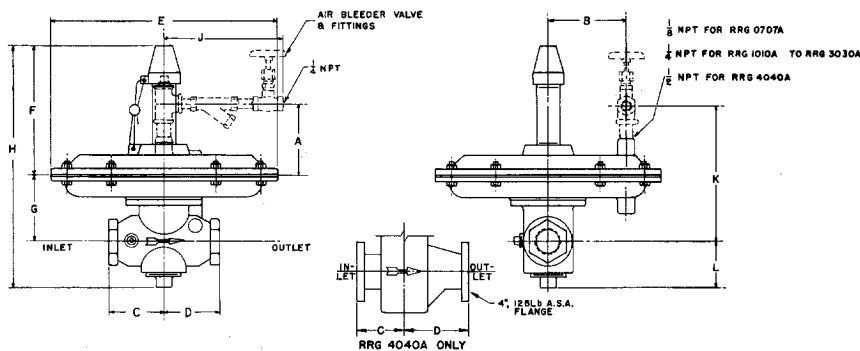
- Sensitive & Accurate
- Precise Gas Flow Control
- Temperature Range Up To 150°F
- Factory Balanced
- Single Valve Control
- Dependable, Consistent Performance

# TYPICAL PIPING SCHEMATIC



Typical installation arrangement for a single burner. For a multiple burner system, see drawing GY303

# DIMENSIONS



MODEL NO.	PIPE SIZE IN & OUT NPT	CAPACITY C.F.H. OF .60 S.G. GAS *	DIMENSIONS IN INCHES										
			A	B	C	D	E	F	G	H	J	K	L
RRG 070A	3/4 x 3/4	1025	3 5/16	2 3/4	2 1/2	2 1/2	8 1/4	6 1/2	2 7/8	11 1/4	7	6 3/16	1 7/8
RRG 1010A	1 x 1	2040	2 3/16	3 3/8	2 3/8	2 3/8	9 3/4	7	2 3/4	11 3/4	7	5 3/16	2
RRG 1515A	1 1/2 x 1 1/2	4080	2 5/16	3 7/8	3	3 1/2	11 3/4	8 5/8	4	15 7/8	7	6 5/16	3 1/4
RRG 2020A	2 x 2	7145	2 5/16	3 7/8	3 3/8	4	11 3/4	8 3/8	4	16	7	6 5/16	3 3/8
RRG 2525A	2 1/2 x 2 1/2	10200	3 7/16	3 5/8	4	4 1/2	14	8 7/8	5 1/2	17 3/8	7	8 1/16	3 1/2
RRG 3030A	3 x 3	16285	3 7/16	3 5/8	5 3/4	5 3/4	14	9 7/8	6	20 1/4	7	9 7/16	4 3/8
RRG 4040A	4 x 4 FLG	28620	4 1/16	10	6 3/8	12 1/4	24	24 1/2	9 3/8	42 3/8	7 7/16	13 7/16	8 1/2

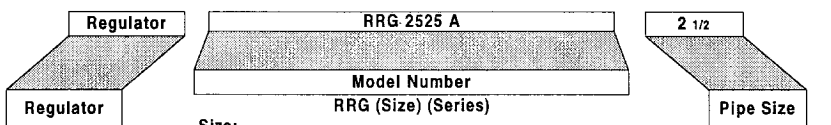
SPECIFIC GRAVITY	CAPACITY FACTOR
.40	1.23
.56	1.03
.60	1.00
1.00	.77
1.52P	.63
2.07B	.54

P = PROPANE  
B = BUTANE

\* BASED ON 10 W.C. DROP THRU REGULATOR.

**GX 249**

## ORDERING INFORMATION



Size:  
From Capacity Table

- Series:
- A - 2 psi maximum inlet pressure; no bleed valve.
  - B - 2 psi maximum inlet pressure with bleed valve.
  - C - 5 psi maximum inlet pressure; no bleed valve.
  - D - 5 psi maximum inlet pressure with bleed valve.

From Capacity Table