



## Burner Capacity Information, BBG 1118/2118

### NATURAL GAS, AMBIENT COMBUSTION AIR OPERATION

SPECIFICATIONS		OPERATIONAL INFORMATION				
<b>Capacity</b> (at 10% Excess Air)	(BTU/hr)	<b>6,660,000</b>	<b>32,330,000</b>	<b>45,800,000</b>	<b>56,000,000</b>	<b>64,700,000</b>
	(kW)	<b>1,760</b>	<b>8,550</b>	<b>12,110</b>	<b>14,810</b>	<b>17,110</b>
Air Capacity	(scfh)	69,000	335,000	474,500	580,000	670,000
	(nm <sup>3</sup> /hr)	1,848	8,974	12,711	15,537	17,948
Air Inlet Pressure	(in.w.c.)	0.3	6.9	13.9	20.8	27.7
	(mbar)	0.7	17.2	34.5	51.7	68.9
Gas Inlet Pressure	(in.w.c.)	0.3	3.7	6.6	9.3	11.8
	(mbar)	0.6	9.2	16.4	23.1	29.4
Flame Length (at 10% Excess Air)	(in)	72	168	180	192	204
	(mm)	1830	4270	4570	4880	5180
Flame Diameter (at 10% Excess Air)	(in)	36	48	48	54	60
	(mm)	910	1220	1220	1370	1520
Maximum Operating Excess	(Air)	250%	400%	500%	600%	600%
	(Fuel)	30%	30%	30%	30%	30%
Maximum Ignition Gas	(scfh)	10,000	45,000	N/R	N/R	N/R
	(nm <sup>3</sup> /hr)	267.9	1,205.5	NR	N/R	N/R
Minimum Ignition Gas	(scfh)	2,100	6,900	N/R	N/R	N/R
	(nm <sup>3</sup> /hr)	56.3	184.8	NR	N/R	N/R

## Burner Capacity Information, BBG 3118

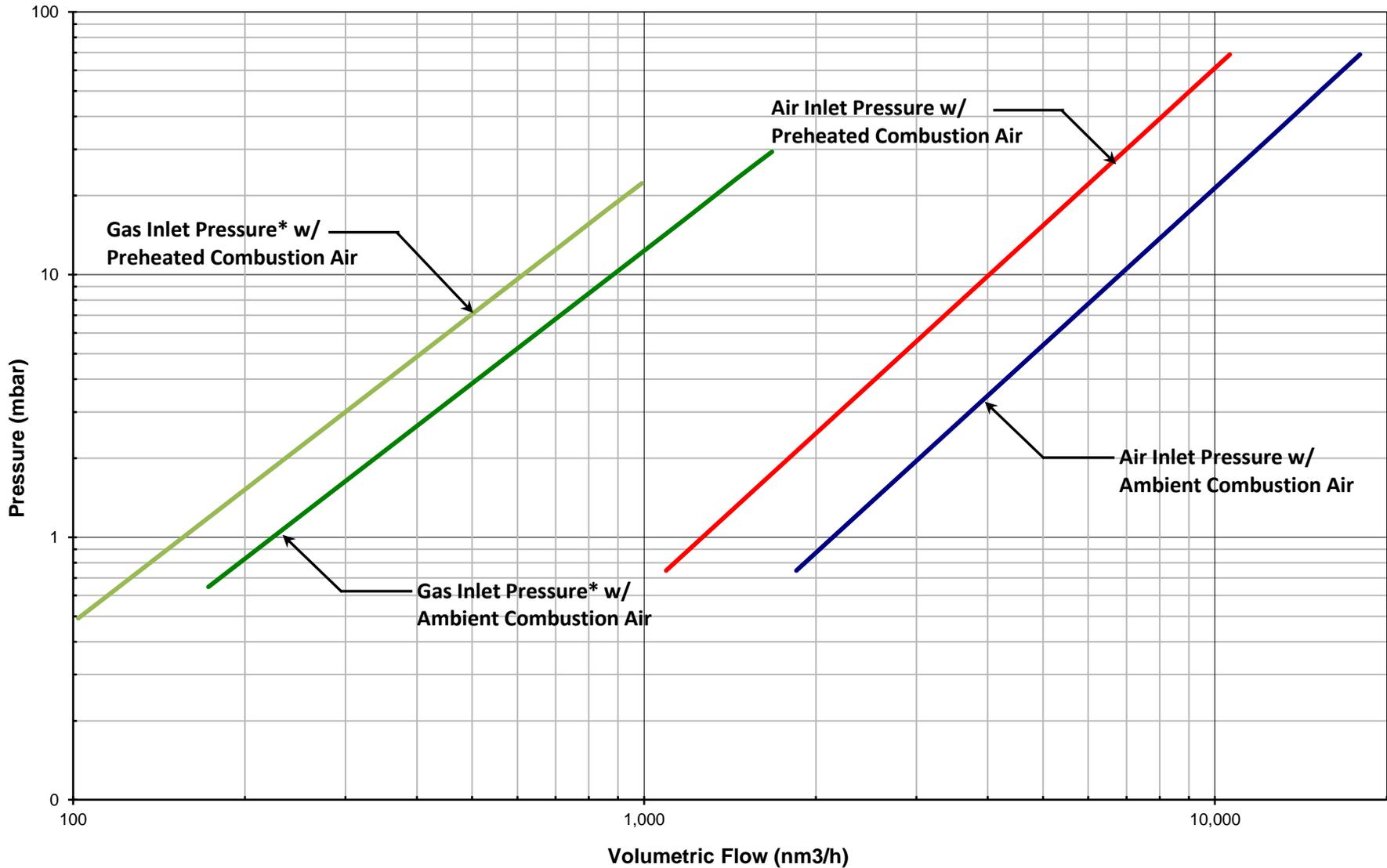
### NATURAL GAS, 900°F/482°C PREHEATED COMBUSTION AIR OPERATION

SPECIFICATIONS		OPERATIONAL INFORMATION				
<b>Capacity</b> (at 10% Excess Air)	(BTU/hr)	<b>3,940,000</b>	<b>19,070,000</b>	<b>27,000,000</b>	<b>33,100,000</b>	<b>38,300,000</b>
	(kW)	<b>1,040</b>	<b>5,040</b>	<b>7,140</b>	<b>8,750</b>	<b>10,130</b>
Air Capacity	(scfh)	40,800	197,600	280,000	343,000	396,400
	(nm <sup>3</sup> /hr)	1,093	5,293	7,501	9,188	10,619
Air Inlet Pressure	(in.w.c.)	0.3	6.9	13.9	20.8	27.7
	(mbar)	0.7	17.2	34.5	51.7	68.9
Gas Inlet Pressure	(in.w.c.)	0.2	2.8	5.0	7.1	9.0
	(mbar)	0.5	6.9	12.5	17.6	22.3
Flame Length (at 10% Excess Air)	(in)	72	132	144	156	168
	(mm)	1830	3350	3660	3960	4270
Flame Diameter (at 10% Excess Air)	(in)	36	48	48	48	54
	(mm)	910	1220	1220	1220	1370
Maximum Operating Excess	(Air)	200%	300%	400%	500%	500%
	(Fuel)	30%	30%	30%	30%	30%
Maximum Ignition Gas	(scfh)	5,500	27,500	N/R	N/R	N/R
	(nm <sup>3</sup> /hr)	147.3	736.7	N/R	N/R	N/R
Minimum Ignition Gas	(scfh)	1,400	5,000	N/R	N/R	N/R
	(nm <sup>3</sup> /hr)	37.5	133.9	N/R	N/R	N/R

#### NOTES:

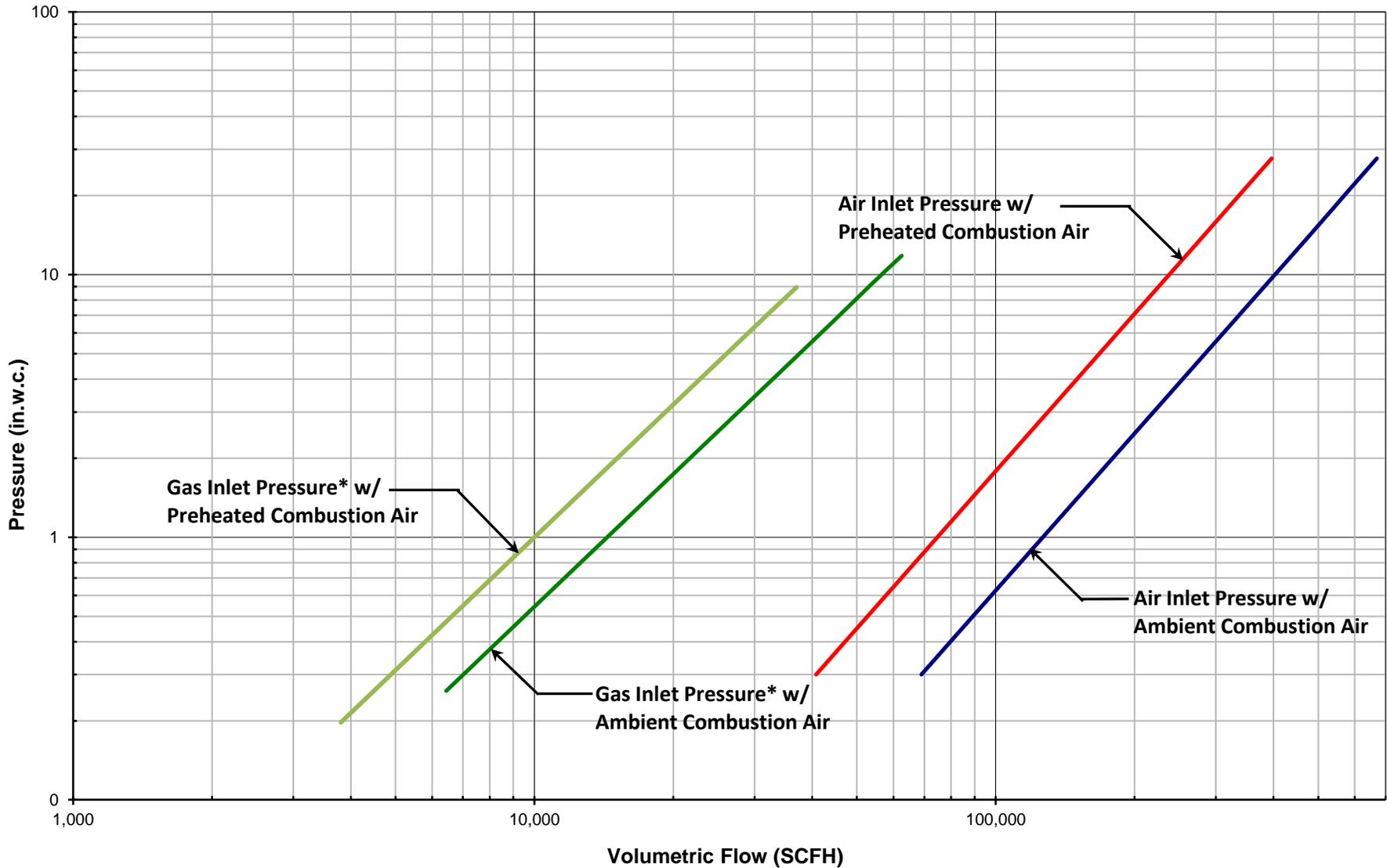
- Capacities based on Natural Gas with HHV of 1034 BTU/ft<sup>3</sup> (Standard), and LHV of 10.21 kWh/nm<sup>3</sup> (Metric), 0.59 S.G., and a stoichiometric ratio of 9.74:1 with burner firing into chamber under no pressure at 10% excess air.
- Air and fuel flows based on STP operating conditions at sea level and industry standard air and gas piping practices.
- Gas inlet pressure given for reference only and should not be used for measuring fuel flow to the burner.
- Flame lengths measured from end of the combustion tile.
- Flame detection via UV scanner.
- Ignition limits are established with Hauck IPG5413 gas pilot, metered air and fuel flows and 5kV/15mA spark ignition transformer; for limits listed as N/R ignition is Not Recommended at this capacity and under other conditions consult Hauck.
- Burner is suitable for use on gaseous fuels other than Natural Gas and with combustion air other than ambient temperature, consult Hauck.

**BBG 1118/2118/3118 Pressure Curves**  
Natural Gas 1034 BTU/ft<sup>3</sup> (HHV Standard) / 10.21 kWh/nm<sup>3</sup> (LHV Metric), 0.59 S.G.  
and Ambient and Preheated Combustion Air



\*Note: Gas Inlet Pressure for BBG burner is not suitable for fuel flow measurement and is given for component sizing and reference only

**BBG 1118/2118/3118 Pressure Curves**  
**Natural Gas 1034 BTU/ft<sup>3</sup> (HHV Standard) / 10.21 kWh/nm<sup>3</sup> (LHV Metric), 0.59 S.G.**  
**and Ambient and Preheated Combustion Air**



\*Note: Gas Inlet Pressure for BBG burner is not suitable for fuel flow measurement and is given for component sizing and reference only

**BBG 1118/2118/3118 Operating and Ignition Window**  
 Natural Gas 1034 BTU/ft<sup>3</sup> (HHV Standard) / 10.21 kWh/nm<sup>3</sup> (LHV Metric), 0.59 S.G.  
 and Ambient Combustion Air

