



Burner Capacity Information, BBG 1120/2120

NATURAL GAS, AMBIENT COMBUSTION AIR OPERATION

SPECIFICATIONS		OPERATIONAL INFORMATION				
Capacity (at 10% Excess Air)	(BTU/hr)	9,000,000	43,330,000	61,300,000	75,000,000	86,700,000
	(kW)	2,380	11,460	16,210	19,840	22,930
Air Capacity	(scfh)	93,288	449,013	635,000	776,780	898,025
	(nm ³ /hr)	2,499	12,028	17,010	20,808	24,056
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.)	0.1	0.6	1.1	1.7	2.2
	(mbar)	0.1	1.4	2.7	4.1	5.5
Flame Length (at 10% Excess Air)	(in)	48	168	192	192	216
	(mm)	1220	4270	4880	4880	5490
Flame Diameter (at 10% Excess Air)	(in)	24	48	48	54	54
	(mm)	610	1220	1220	1370	1370
Maximum Operating Excess	(Air)	250%	500%	600%	700%	800%
	(Fuel)	30%	30%	30%	30%	30%
Maximum Ignition Gas	(scfh)	11,268	54,235	N/R	N/R	N/R
	(nm ³ /hr)	301.8	1,452.9	NR	N/R	N/R
Minimum Ignition Gas	(scfh)	2,737	7,683	N/R	N/R	N/R
	(nm ³ /hr)	73.3	205.8	NR	N/R	N/R

Burner Capacity Information, BBG 3120

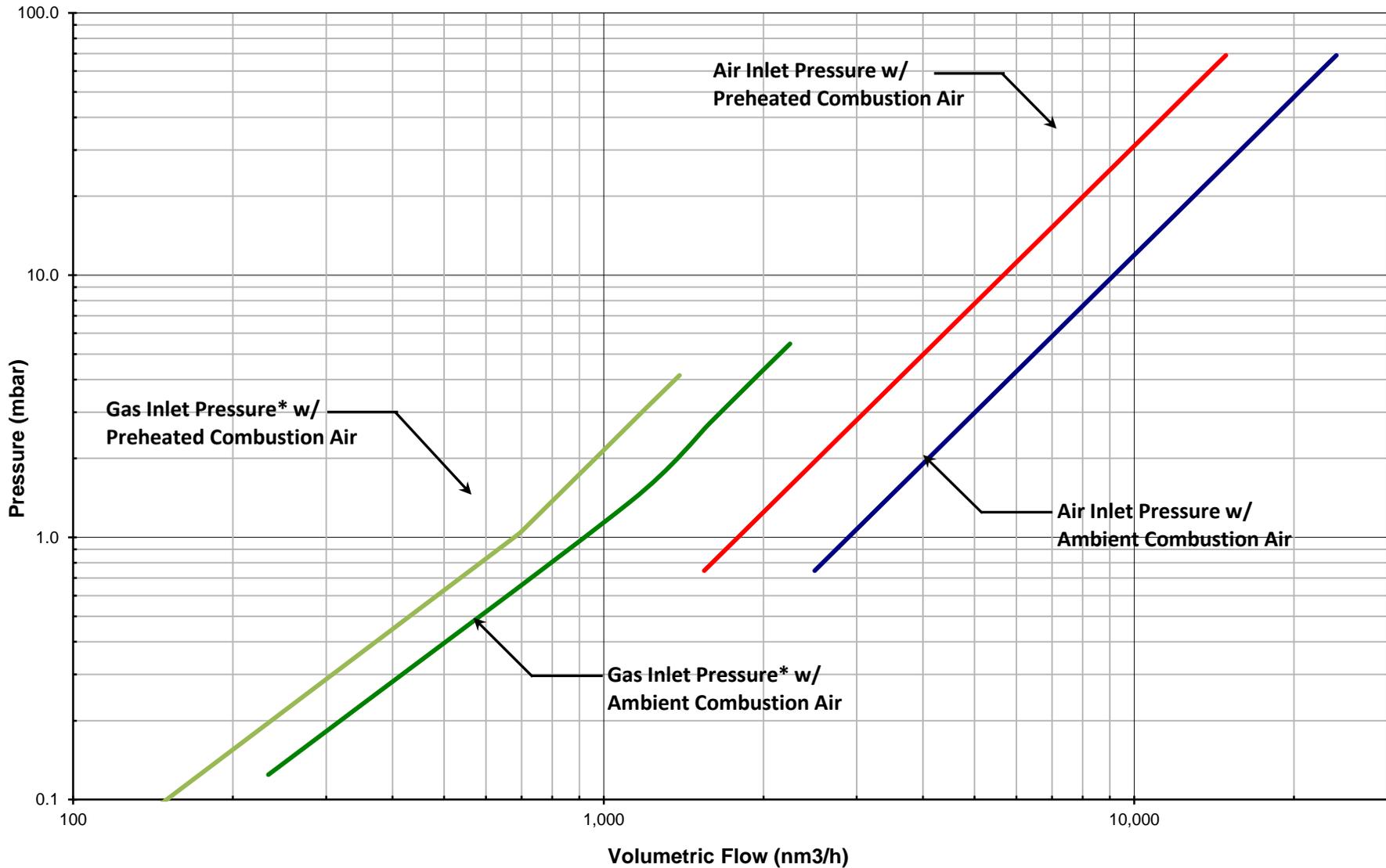
NATURAL GAS, 900°F/482°C PREHEATED COMBUSTION AIR OPERATION

SPECIFICATIONS		OPERATIONAL INFORMATION				
Capacity (at 10% Excess Air)	(BTU/hr)	5,570,000	26,830,000	37,900,000	46,400,000	53,700,000
	(kW)	1,470	7,100	10,020	12,270	14,200
Air Capacity	(scfh)	57,753	277,975	393,116	480,889	555,949
	(nm ³ /hr)	1,547	7,446	10,531	12,882	14,893
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.)	0.0	0.4	0.8	1.3	1.7
	(mbar)	0.1	1.0	2.1	3.1	4.2
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)	325%	463%	602%	741%	741%
	(Fuel)	30%	30%	30%	30%	30%
Maximum Ignition Gas	(scfh)	5,500	27,500	N/R	N/R	N/R
	(nm ³ /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 ³ /hr)	37.5	133.9	N/R	N/R	N/R

NOTES:

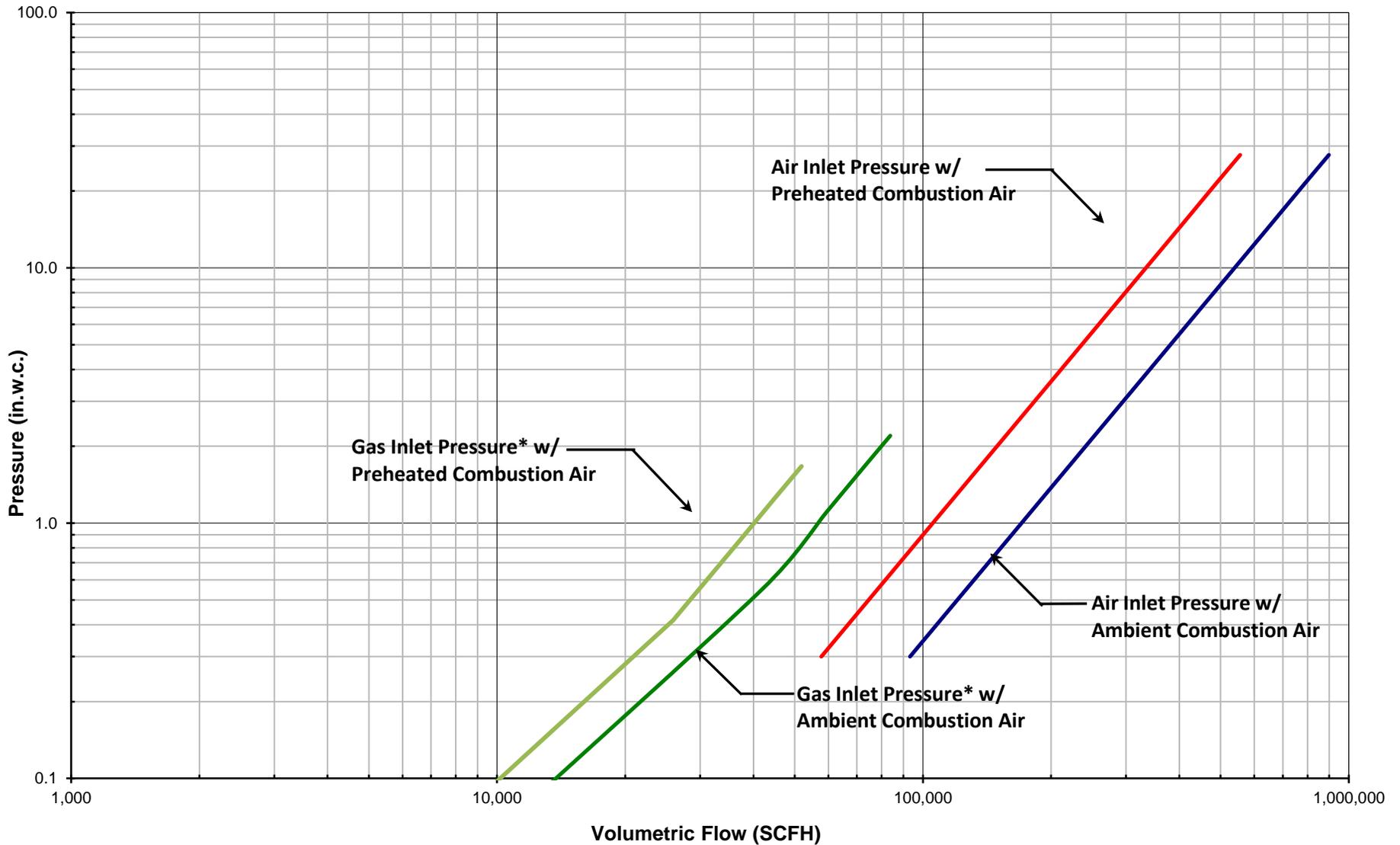
- Capacities based on Natural Gas with HHV of 1034 BTU/ft³ (Standard), and LHV of 10.21 kWh/nm³ (Metric), 0.59 S.G., and a stoichiometric ratio of 9.74:1 with burner firing into chamber under no pressure at 10% excess air.
- Air and fuel flows based on STP operating conditions at sea level and industry 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 1120/2120/3120 Pressure Curves
Natural Gas 1034 BTU/ft³ (HHV Standard) / 10.21 kWh/nm³ (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 1120/2120/3120 Pressure Curves
Natural Gas 1034 BTU/ft³ (HHV Standard) / 10.21 kWh/nm³ (LHV Metric), 0.59 S.G.
and Ambient and Preheated Combustion Air



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BBG 1120/2120/3120 Operating and Ignition Window
 Natural Gas 1034 BTU/ft³ (HHV Standard) / 10.21 kWh/nm³ (LHV Metric), 0.59 S.G.
 and Ambient Combustion Air

