



Burner Capacity Information, BBG 1114/2114

NATURAL GAS, AMBIENT COMBUSTION AIR OPERATION

SPECIFICATIONS		OPERATIONAL INFORMATION				
Capacity (at 10% Excess Air)	(BTU/hr)	3,860,000	19,110,000	27,000,000	33,200,000	38,300,000
	(kW)	1,020	5,050	7,140	8,780	10,130
Air Capacity	(scfh)	40,000	198,000	280,000	343,500	397,000
	(nm ³ /hr)	1,072	5,304	7,501	9,202	10,635
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	0.8	1.1	1.3	1.5
	(mbar)	0.6	2.0	2.7	3.2	3.7
Flame Length (at 10% Excess Air)	(in)	84	120	154	168	180
	(mm)	2130	3050	3910	4270	4570
Flame Diameter (at 10% Excess Air)	(in)	36	48	48	54	54
	(mm)	910	1220	1220	1370	1370
Maximum Operating Excess	(Air)	200%	400%	400%	500%	500%
	(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	4,100	N/R	N/R	N/R
	(nm ³ /hr)	37.5	109.8	N/R	N/R	N/R

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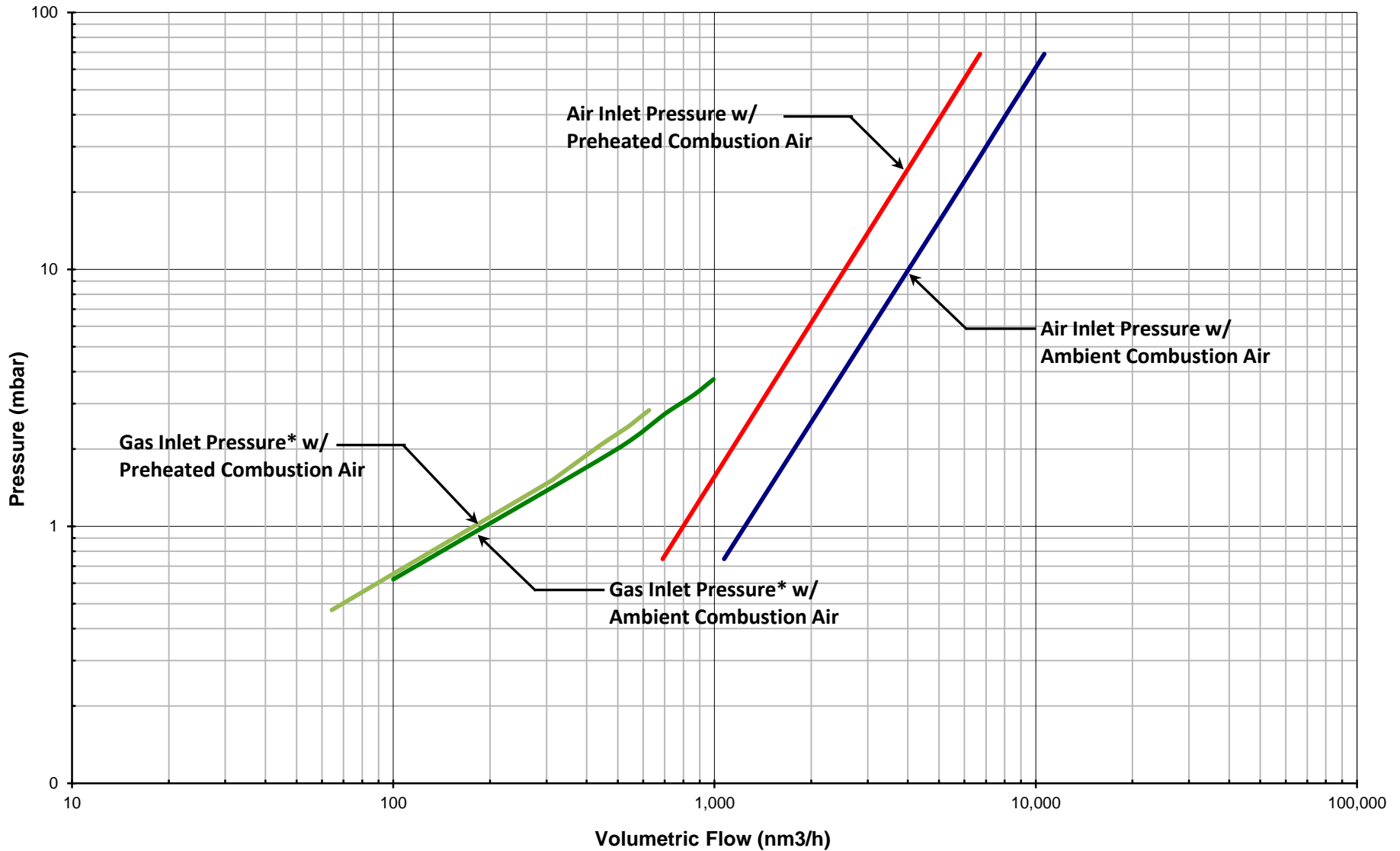
NATURAL GAS, 900°F/482°C PREHEATED COMBUSTION AIR OPERATION

SPECIFICATIONS		OPERATIONAL INFORMATION				
Capacity (at 10% Excess Air)	(BTU/hr)	2,490,000	12,060,000	17,100,000	20,900,000	24,200,000
	(kW)	660	3,190	4,520	5,530	6,400
Air Capacity	(scfh)	25,750	125,000	177,000	216,750	250,375
	(nm ³ /hr)	690	3,349	4,741	5,806	6,707
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	0.6	0.8	1.0	1.1
	(mbar)	0.5	1.5	2.1	2.5	2.8
Flame Length (at 10% Excess Air)	(in)	72	96	108	120	132
	(mm)	1830	2440	2740	3050	3350
Flame Diameter (at 10% Excess Air)	(in)	36	48	48	54	54
	(mm)	910	1220	1220	1370	1370
Maximum Operating Excess	(Air)	150%	300%	300%	400%	400%
	(Fuel)	30%	30%	30%	30%	30%
Maximum Ignition Gas	(scfh)	3,500	18,000	N/R	N/R	N/R
	(nm ³ /hr)	93.8	482.2	N/R	N/R	N/R
Minimum Ignition Gas	(scfh)	1,100	3,000	N/R	N/R	N/R
	(nm ³ /hr)	29.5	80.4	N/R	N/R	N/R

NOTES:

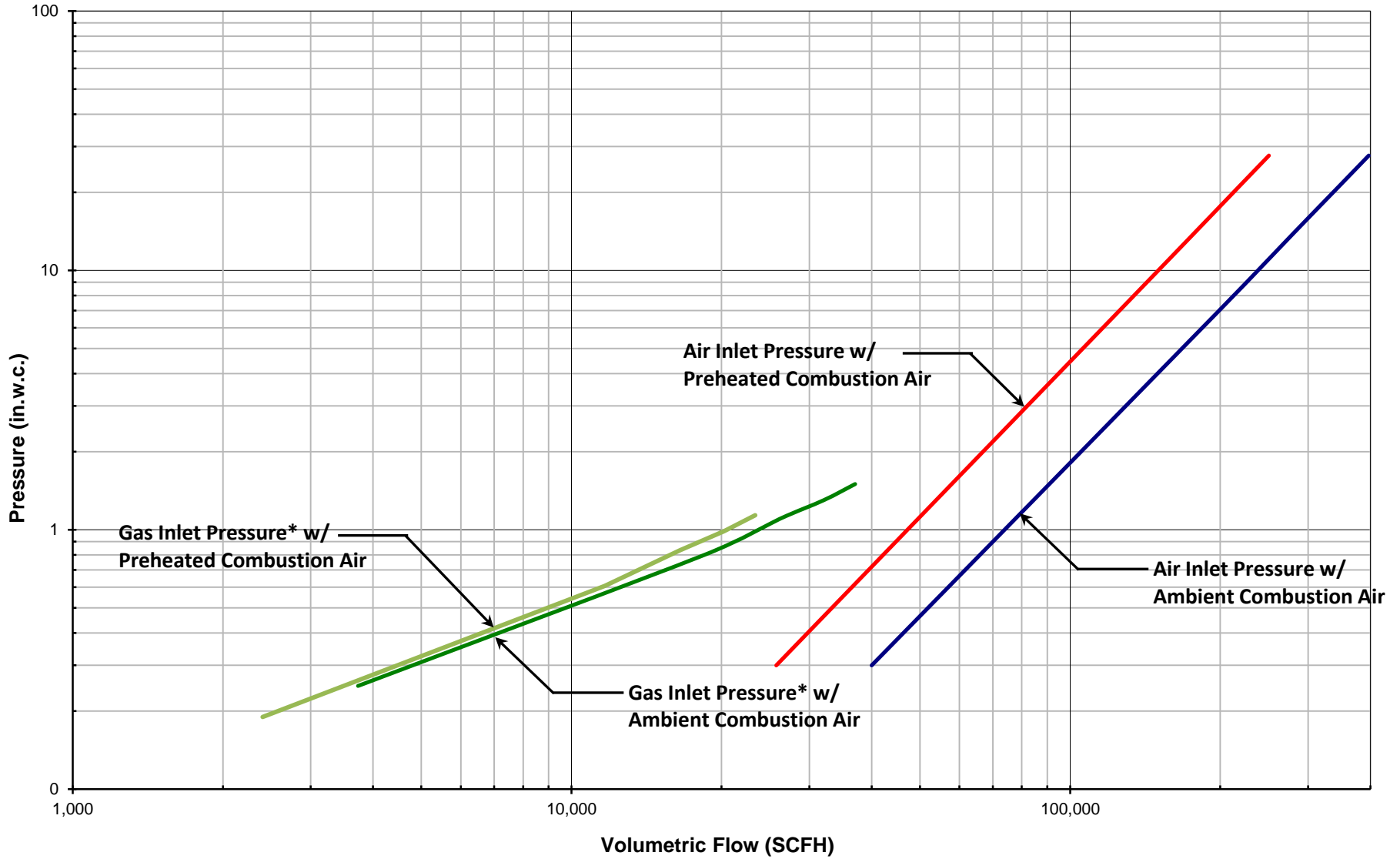
- Capacities based on Natural Gas with HHV of 1034 BTU/ft³ (Standard), and LHV of 10.21 kWh/nm³ (Metric), 0.59 S.G., and a stoichiometric ratio of 9.74:1 with burner firing into chamber under no pressure at 10% excess air.
- Air and fuel flows based on STP operating conditions at sea level and industry 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 1114/2114/3114 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 1114/2114/3114 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 1114/2114/3114 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

