



Burner Capacity Information, BBG 1124/2124

NATURAL GAS, AMBIENT COMBUSTION AIR OPERATION

SPECIFICATIONS		OPERATIONAL INFORMATION				
Capacity (at 10% Excess Air)	(BTU/hr)	12,550,000	61,770,000	87,300,000	106,200,000	123,000,000
	(kW)	3,320	16,340	23,090	28,090	32,530
Air Capacity	(scfh)	130,000	640,000	905,000	1,100,000	1,275,000
	(nm ³ /hr)	3,482	17,144	24,243	29,467	34,155
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	1.4	2.0	2.5	2.9
	(mbar)	0.6	3.4	4.9	6.1	7.2
Flame Length (at 10% Excess Air)	(in)	72	250	275	285	300
	(mm)	1830	6350	6990	7240	7620
Flame Diameter (at 10% Excess Air)	(in)	36	48	54	60	60
	(mm)	910	1220	1370	1520	1520
Maximum Operating Excess	(Air)	100%	400%	600%	600%	600%
	(Fuel)	15%	15%	15%	15%	15%
Maximum Ignition Gas	(scfh)	15,000	70,000	N/R	N/R	N/R
	(nm ³ /hr)	401.8	1,875.2	N/R	N/R	N/R
Minimum Ignition Gas	(scfh)	6,800	13,500	N/R	N/R	N/R
	(nm ³ /hr)	182.2	361.6	N/R	N/R	N/R

Burner Capacity Information, BBG 3124

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

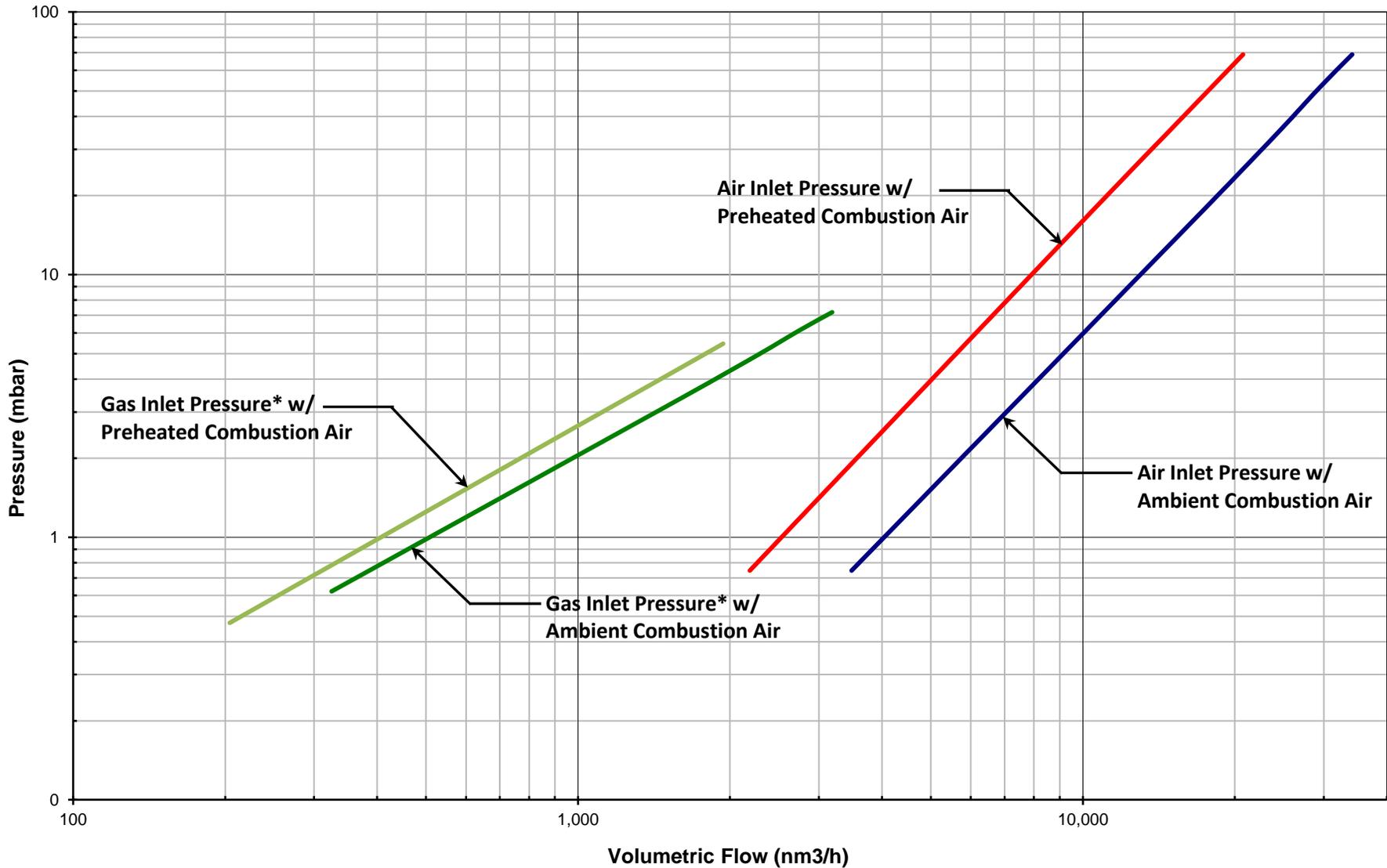
SPECIFICATIONS		OPERATIONAL INFORMATION				
Capacity (at 10% Excess Air)	(BTU/hr)	7,890,000	37,350,000	52,800,000	64,800,000	74,800,000
	(kW)	2,090	9,880	13,970	17,140	19,780
Air Capacity	(scfh)	81,720	387,000	547,600	671,100	775,200
	(nm ³ /hr)	2,189	10,367	14,669	17,977	20,766
Air Inlet Pressure	(in.w.c.)	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	1.0	1.5	1.9	2.2
	(mbar)	0.5	2.6	3.7	4.7	5.5
Flame Length (at 10% Excess Air)	(in)	72	96	150	200	250
	(mm)	1830	2440	3810	5080	6350
Flame Diameter (at 10% Excess Air)	(in)	36	48	48	60	60
	(mm)	910	1220	1220	1520	1520
Maximum Operating Excess	(Air)	100%	300%	500%	500%	500%
	(Fuel)	15%	15%	15%	15%	15%
Maximum Ignition Gas	(scfh)	9,750	40,000	N/R	N/R	N/R
	(nm ³ /hr)	261.2	1,071.5	N/R	N/R	N/R
Minimum Ignition Gas	(scfh)	4,500	10,000	N/R	N/R	N/R
	(nm ³ /hr)	120.5	267.9	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 58155 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.
- Burner is suitable for use on gaseous fuels other than Natural Gas and with combustion air other than ambient temperature, consult Hauck.

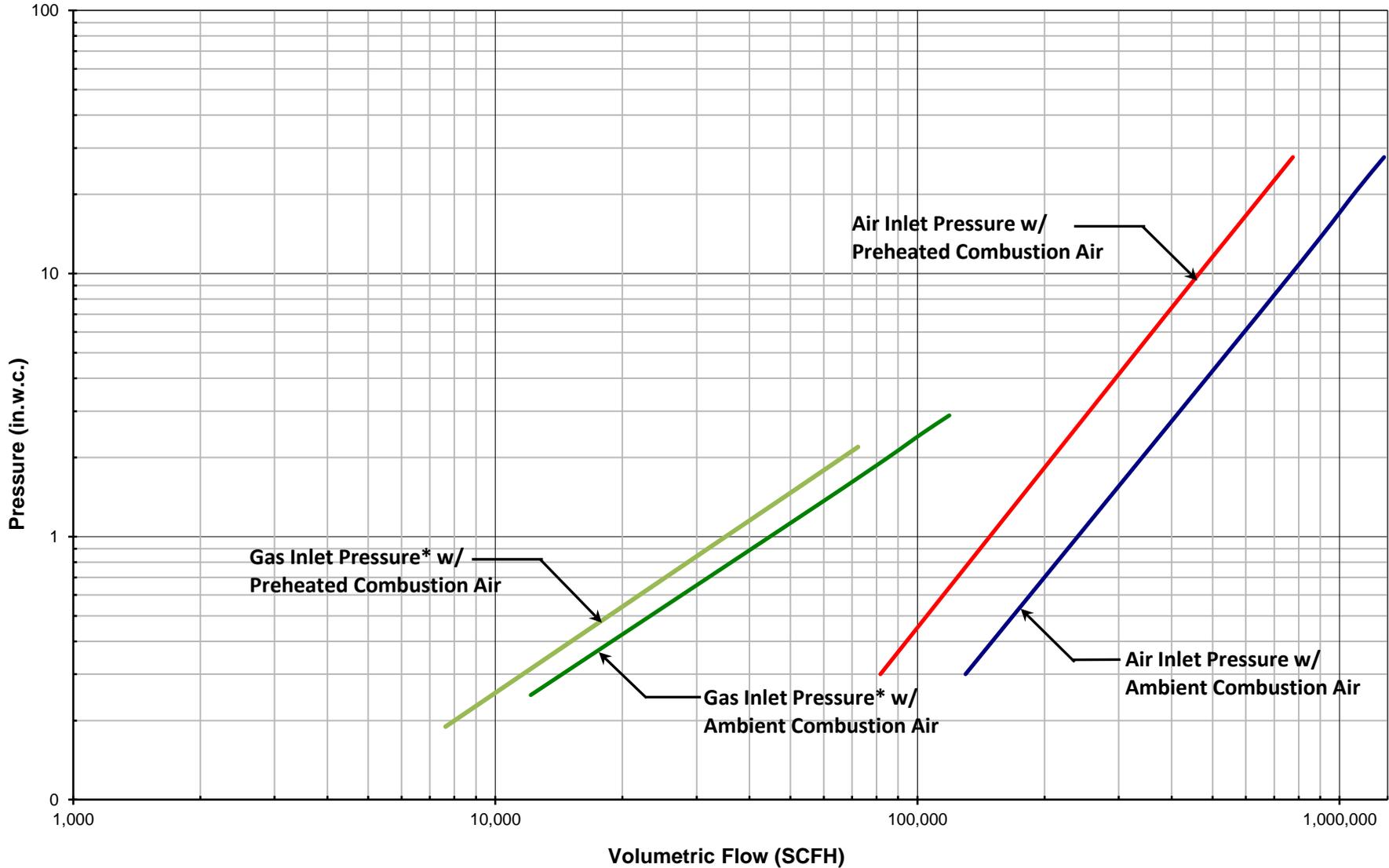
2013-08-21

BBG 1124/2124/3124 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 1124/2124/3124 Pressure Curves
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BBG 1124/2124/3124 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

