




# P-Tube

## Recuperative Burners

Model PTB035

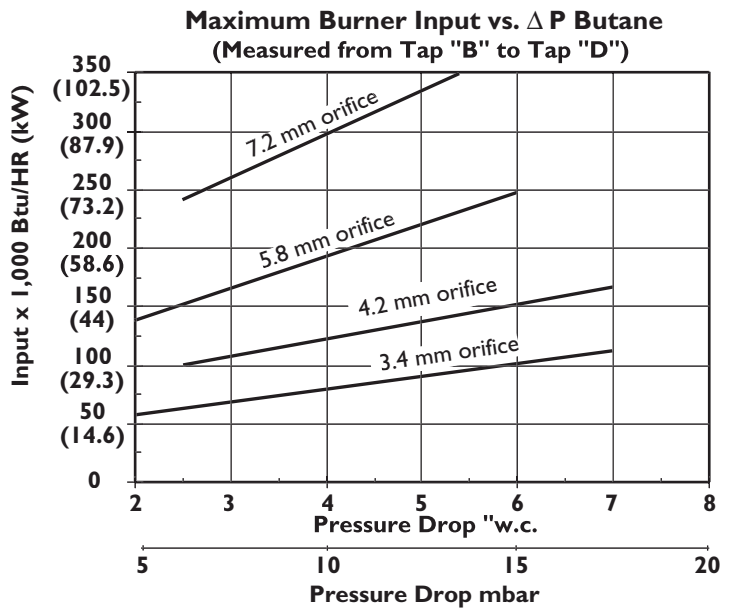
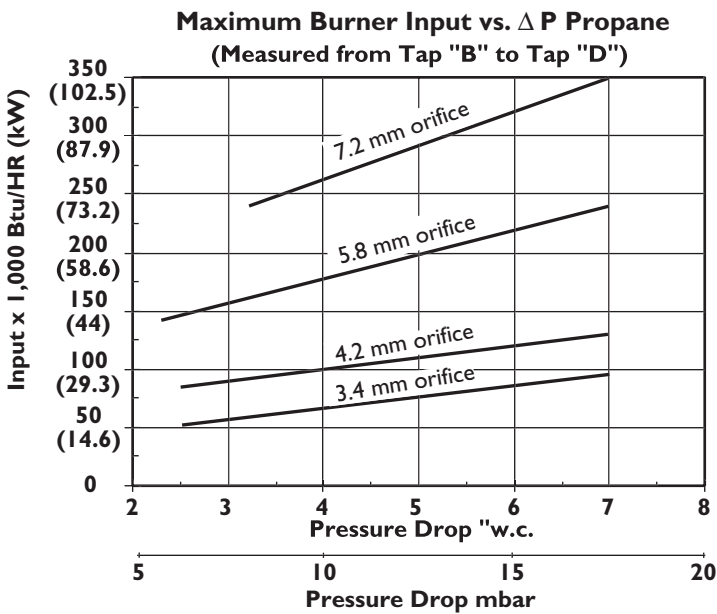
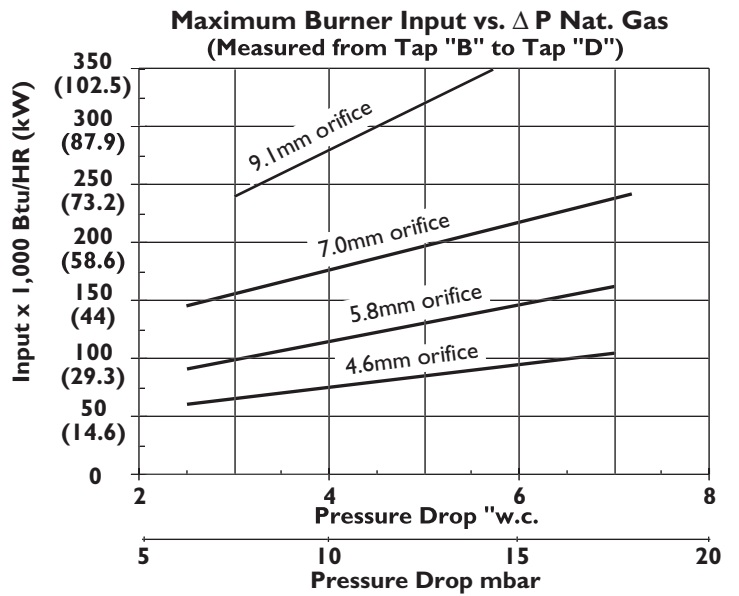
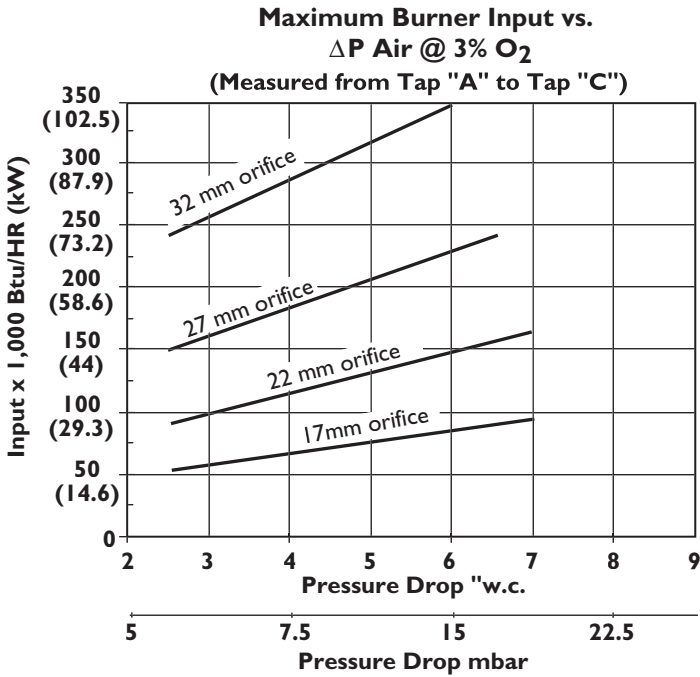
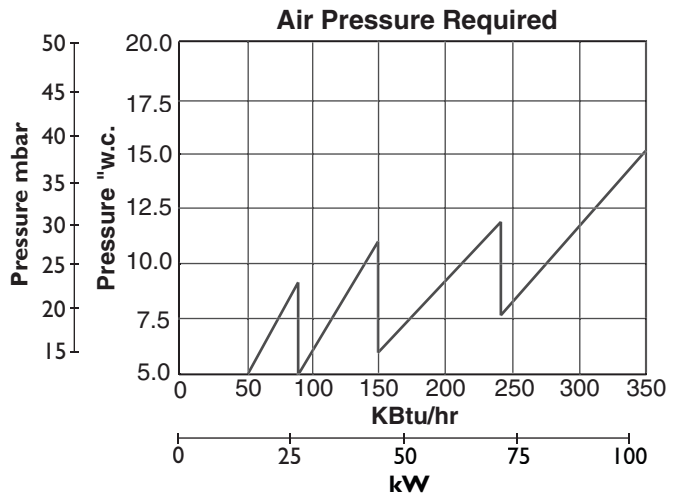
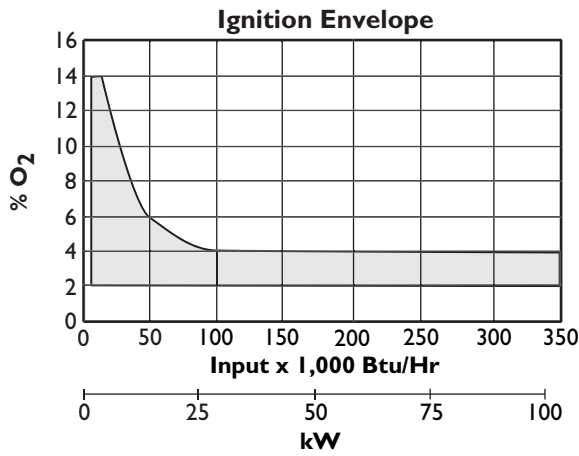
Version 1.00

Parameter		Burner Input 1000's Btu/Hr (Kw)			
		100 (29.3)	150 (44.0)	200 (58.6)	350 (103)
Low firing rate 1000's Btu/hr (kW) Between 150-220% excess air		10 (2.9)	10 (2.9)	10 (2.9)	10 (2.9)
Differential air pressure "w.c. (mbar) between tap A and C (See Pages 3 & 4)		7.0 (17.4)	6.2 (15.4)	4.5 (11.2)	6.0 (14.9)
Recommended air orifice diameter mm		17	22	27	32
Air Flow SCFH (m <sup>3</sup> /hour) At 15% excess air		1035 (29.2)	1725 (48.8)	2300 (65.1)	4025 (113.7)
Differential gas pressure "w.c. (mbar) between tap B and D (See Pages 3 & 4)	nat. gas	5.8 (14.4)	2.7 (6.7)	5.3 (13.2)	5.7 (14.2)
	propane	6.8 (16.9)	2.6 (6.5)	5.2 (12.9)	7.0 (17.4)
	butane	5.3 (13.2)	5.9 (14.7)	4.2 (10.5)	5.4 (13.5)
Recommended gas orifice plate mm	nat. gas	4.6	7.0	7.0	9.1
	propane	3.4	5.8	5.8	7.2
	butane	3.4	4.2	5.8	7.2
Piping		N.P.T. or B.S.P. interface is available.			
Flame detection	U.V. Scanner	Natural Gas only			
	Flame Rod	Natural Gas, propane, butane			
Ignition		direct spark ignition (6 kVAC)			
Fuels		Natural gas, propane, butane For any other mixed gas, contact Eclipse Combustion			

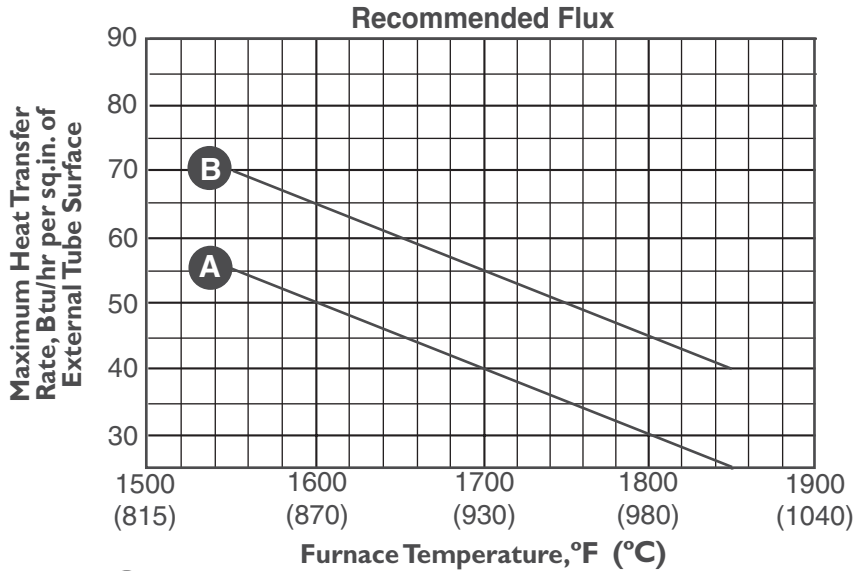
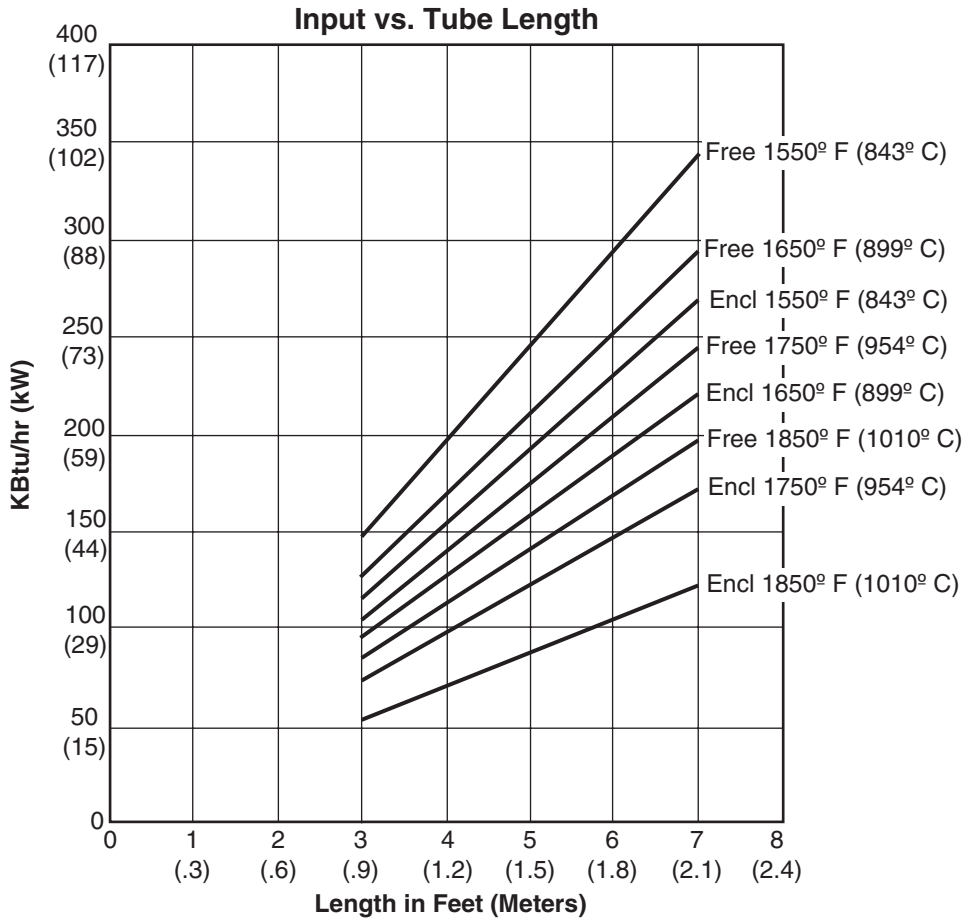
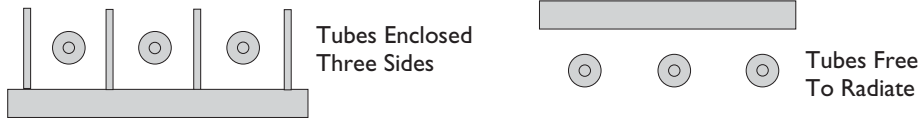
 Note: Air supply pressure required at the burner inlets is shown on page 2. Gas pressure should be at least 1" w.c. (2.49 mbar) less than air pressure.

- The low firing rate represents the capability of the burner. Achievement of this rate will be affected by the control method and ratio-regulator used in the system design. Typical ratio regulators provide a 10 to 1 turndown from high to low fire. Eclipse recommends a maximum of 8 burners per ratio regulator.
- All inputs based on gross caloric values.
- Eclipse reserves the right to change the construction and/or configuration of our products at any time without being obliged to adjust earlier supplies accordingly.
- Plumbing of air and gas will affect accuracy of orifice readings. All information is based on generally acceptable air and gas piping practices.
- Maximum furnace temperature is 1850°F (1010°C)
- For vertical applications, contact Eclipse Sales Representative.

**Performance Graphs**  
PTB035 v1.00



**Performance Graphs (Cont.)**  
PTB035 v1.00

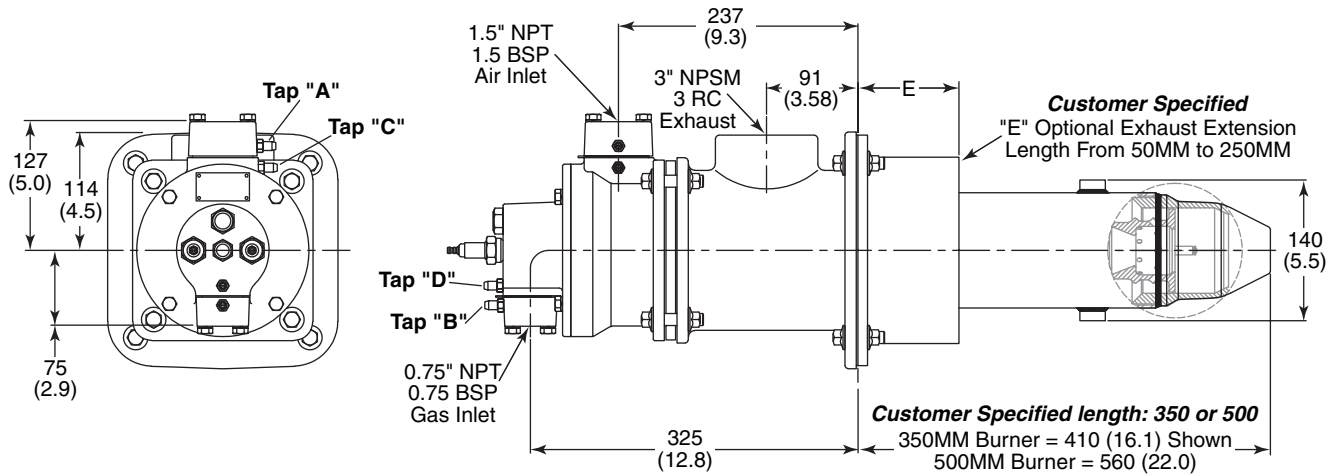


- A** Tube enclosed on three sides *Metallic inner & outer tube*
- B** Tube free to radiate *Metallic inner & outer tube*

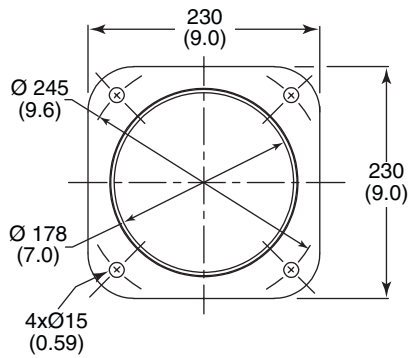
# Dimensions & Specifications

PTB035 v1.00

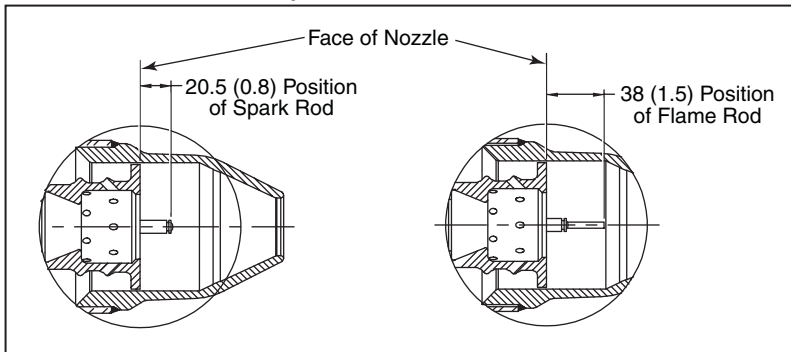
Dimensions in mm (Inches)



## Mounting Flange Dimensions



## Spark and Flame Rod Detail



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