

Eclipse Linnox Burners

Model Tee ULE

Data sheet Edition 12.14

Version 1

Maximum Burner Inputs¹ (kBtu/h)

		2 Rows						
Number of Modules		3	4	5	6	7	8	9
Module ID	Input per Module, kBtu/h							
96	360	-	-	-	-	-	5760	6480
120	450	-	-	-	-	6300	7200	8100
144	540	-	-	-	6480	7560	8640	9720
240	900	-	7200	9000	10,800	12,600	14,400	16,200
360	1350	8100	10,800	13,500	16,200	18,900	21,600	24,300
480	1800	10,800	14,400	18,000	21,600	25,200	28,800	32,400
720	2700	16,200	21,600	27,000	32,400	37,800	43,200	-


Utilize the Linnox Model Straight ULE up to 5400 kBtu/h

		3 Rows						
Number of Modules		3	4	5	6	7	8	9
Module ID	Input per Module, kBtu/h							
60	225	-	-	-	-	-	-	6075
72	270	-	-	-	-	5670	6480	7290
96	360	-	-	-	6480	7560	8640	9720
120	450	-	-	6750	8100	9450	10,800	12,150
144	540	-	6480	8100	9720	11,340	12,960	14,580
240	900	8100	10,800	13,500	16,200	18,900	21,600	24,300
360	1350	12,150	16,200	20,250	24,300	28,350	32,400	36,450
480	1800	16,200	21,600	27,000	32,400	37,800	43,200	-
720	2700	24,300	32,400	40,500	-	-	-	-

Utilize the Linnox Model Straight ULE up to 5400 kBtu/h

		4 Rows						
Number of Modules		3	4	5	6	7	8	9
Module ID	Input per Module, kBtu/h							
48	180	-	-	-	-	-	5760	6480
60	225	-	-	-	-	6300	7200	8100
72	270	-	-	-	6480	7560	8640	9720
96	360	-	5760	7200	8640	10,080	11,520	12,960
120	450	-	7200	9000	10,800	12,600	14,400	16,200
144	540	6480	8640	10,800	12,960	15,120	17,280	19,440
240	900	10,800	14,400	18,000	21,600	25,200	28,800	32,400
360	1350	16,200	21,600	27,000	32,400	37,800	43,200	-
480	1800	21,600	28,800	36,000	43,200	-	-	-
720	2700	32,400	43,200	-	-	-	-	-

Utilize the Linnox Model Straight ULE up to 5400 kBtu/h

Parameter	Specifications (US Customary Units)
Turndown from Maximum Input	8:1 or 10:1
Fuels² <i>For any other gas, contact Eclipse, Inc.</i>	Natural Gas
Main Gas Inlet Pressure <i>Fuel pressure at ratio regulator inlet</i>	40 to 50 "w.c.
Pilot Gas and Air Inlet Pressure	8 to 12 "w.c.
Excess Air	40-50%
Flame Detection	UV Scanner Only
Ignition	Pilot only (Interrupted)
High Fire Visible Flame Length <i>Measured from the outlet end of the burner shields</i>	10-15 inches
Emissions (estimated)³	< 15 ppm NOx at 3% O2 (< 3 ppm NOx at 17% O2) < 100 ppm CO at 3% O2 (22 ppm CO at 17% O2)
Maximum Process Air Inlet Temperature	840°F Maximum
Maximum Process Air Outlet Temperature	1470°F Maximum
Maximum Combustion Air Temperature	390°F Maximum
Process Air Axial Velocity	1000 fpm minimum; 3000 fpm maximum Recommended velocity is 2500 fpm ⁴
Combustion Air Filtration Requirement	99% Removal Efficiency down to 100 microns
Approvals	 АНЗО

1. All inputs based upon gross calorific values, natural gas specific gravity of 0.60, and standard conditions; 1 atmosphere, 70°F.

2. See Design Guide 159 for more information about typical fuel composition and properties.

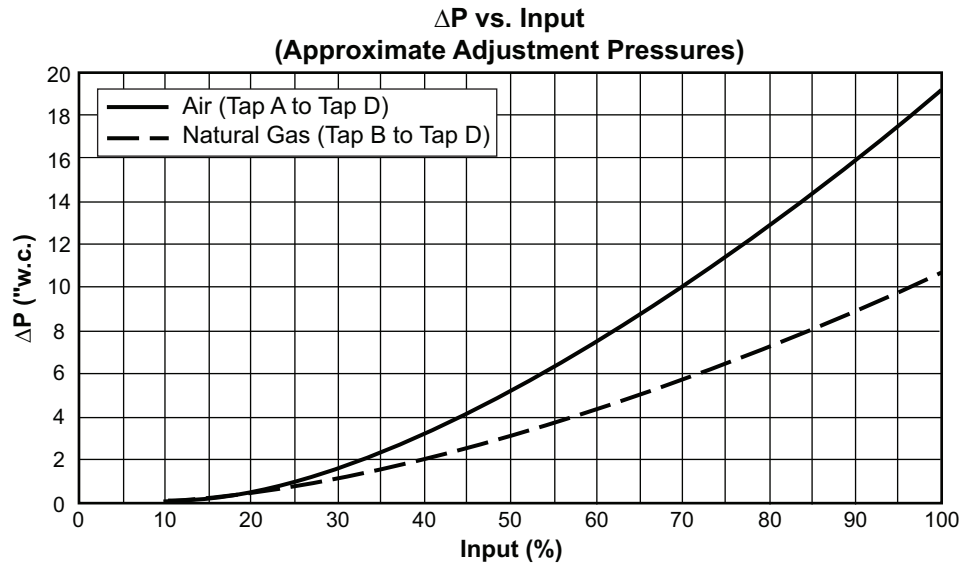
3. Estimated emissions are not guaranteed values. These values can be influenced by process conditions.

4. WARNING: Velocity perpendicular to the flame is not allowed

WARNING: Process air flow velocity outside of the specified range will affect emissions

- Contact Eclipse for burner inputs outside of the specifications indicated.
- All information is based on laboratory testing. Different chamber conditions will affect the data.
- CO emission is largely influenced by chamber conditions. Contact your local Eclipse representative for an estimate of CO emission on your application.
- 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.

Performance Graphs

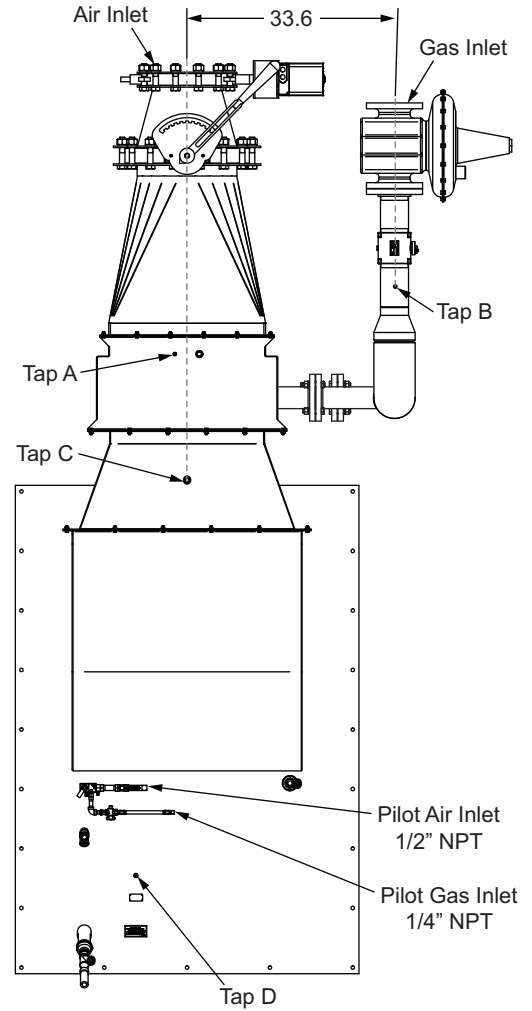
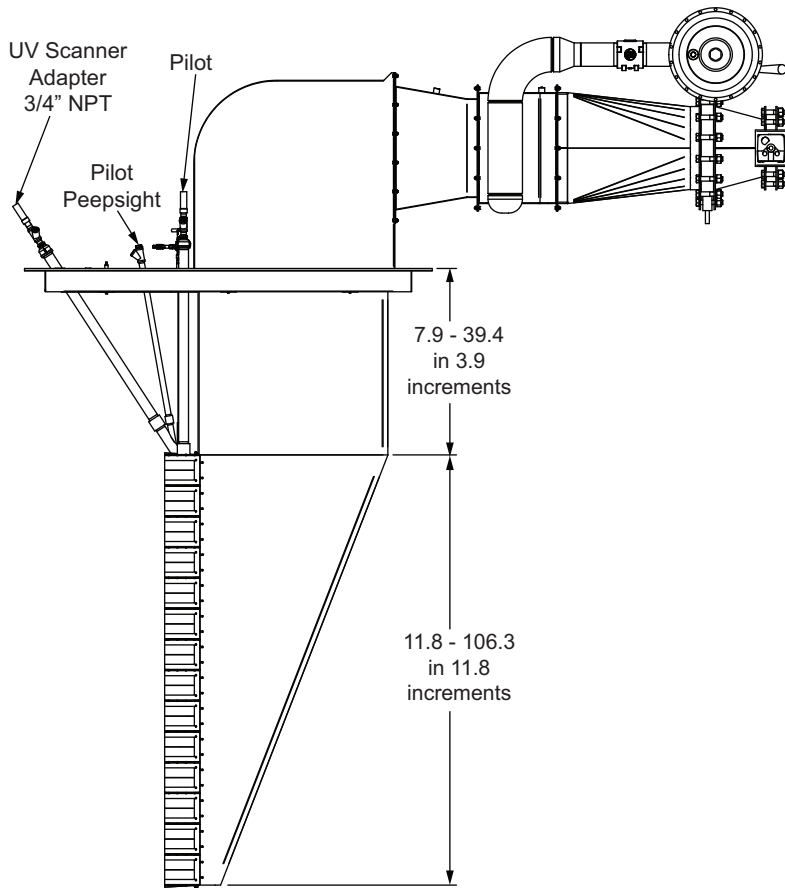


Air and gas differential pressures shown in the graph above are based on 40% excess air in laboratory conditions. These curves are intended to serve as a guideline to begin burner setup. Further adjustments may be required based on flame appearance (see Installation Guide 159).

Note: The combustion air pressure required at the air inlet is higher than the pressure measured at the mixer inlet (Tap A to Tap D) and is a function of the valves furnished with the burner and the final layout of the combustion air valves supplied by Eclipse. Consult Eclipse for an estimate of the air pressure required at the air inlet.

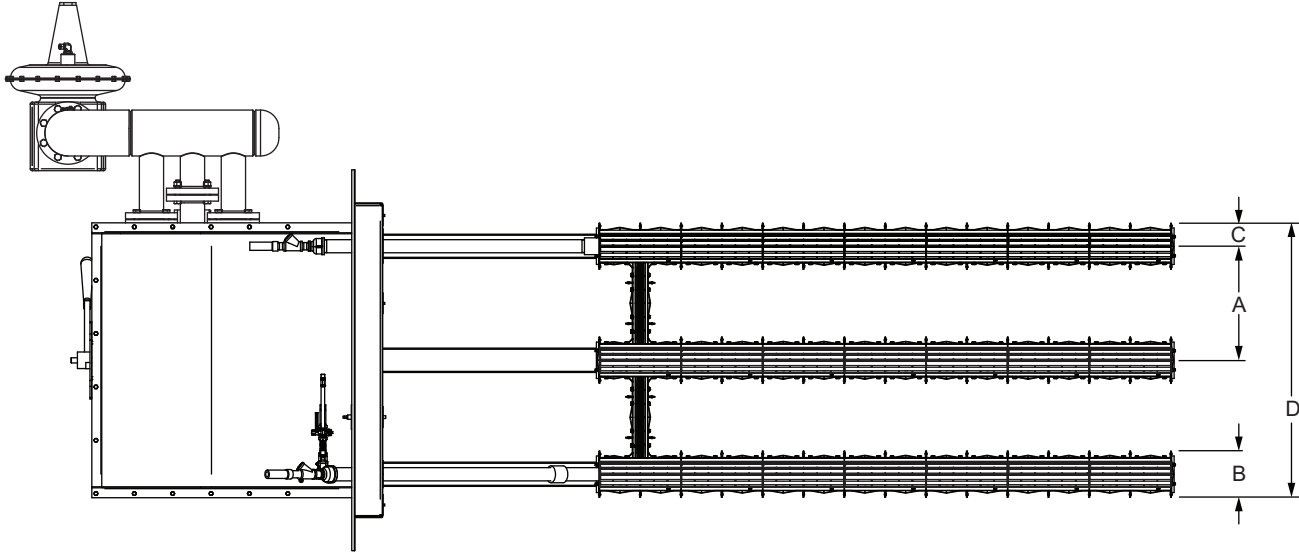
Dimensions and Specifications

Dimensions in inches



Input, kBtu/h	Gas Inlet (10:1)	Gas Inlet (8:1)
5670 - 10800	2" NPT	2-1/2" NPT
11340 - 16200	2-1/2" NPT	3" NPT
17280 - 19440	3" NPT	4" Flanged
20250 - 28800	4" Flanged	4" Flanged
32400 - 43300	6" Flanged	4" Flanged

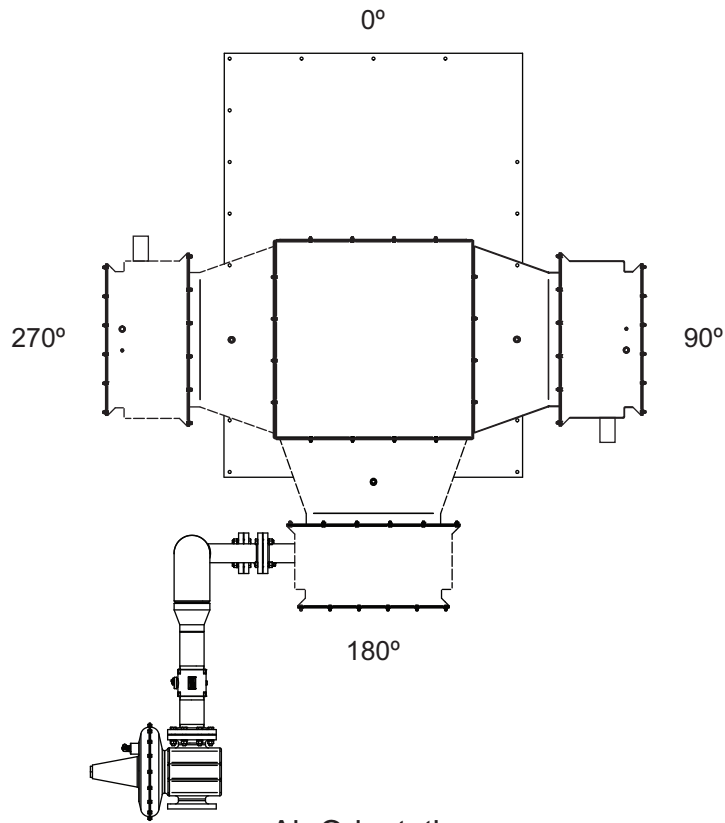
Input, kBtu/h	Air Inlet
5670 - 7200	5" Flanged
7290 - 16200	6" Flanged
17280 - 28800	8" Flanged
32400 - 43300	10" Flanged



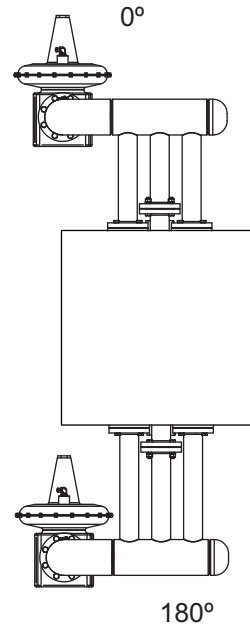
Dimensions in Inches

Module ID	A	B	C	D, 2 Rows	D, 3 Rows	D, 4 Rows
24-144	14.1	4.3	2.2	18.3	32.4	46.4
240	14.8	5.0	2.5	19.9	34.7	49.6
360	16.5	6.7	3.4	23.2	39.7	56.2
480	17.3	7.5	3.8	24.8	42.0	59.3
720	19.3	9.5	4.8	28.8	48.1	67.4

Gas and Air Orientations



Air Orientation
(Firing Position shown at 0°)



Gas Orientation
(Firing Position shown at 0°)