OVENPAK[®] LE Burners

Low emissions, high performance natural gas burners



- Burns any clean fuel gas
- Operates on low gas supply pressures
- Provides clean combustion with low NOx and CO levels
- Compact burner design provides quick and easy installation
- Balanced pressure design for easy commissioning and adjustment
- Visible ignition action speeds commissioning and maintenance
- High turndown for exceptional process control

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Product description

OVENPAK[®] LE Burners are nozzle-mixing gas burners for many industrial, direct-fired applications where clean combustion and high turndown are required. The burners are simple and versatile for use on a variety of heating applications. The gas flows through the nozzle, then along the inside of the burner cone where combustion air is rapidly mixed with the fuel. This produces a very wide turndown range and a highly stable flame under a variety of operating conditions.

Fuel and air pressures for the burner are balanced (always equal). This unique design provides simple operation and adjustment throughout the operational range of the burner. The balanced pressure feature also makes the OVENPAK[®] LE Burner resistant to firing chamber pressure fluctuations.

The OVENPAK[®] LE Burner is available in several versions. Packaged burners contain integral combustion air blower and linked air and fuel control valves to maintain the gas-air ratio over the full operating range. EB versions include an internal air control valve designed to be connected to an external fuel control valve. The EB version may also be ordered with no control valves.

The OVENPAK[®] LE Burner includes a combustion air blower with non-sparking paddle wheel-type impeller, pilot, spark ignitor, stainless steel discharge sleeve, mixing cone, and provision for a flame sensor.



- 1) Air control valve
- 2) High precision connecting linkage
- 3) Fuel control valve
- 4) Access cover to tuning screw
- 5) Tuning screw



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Available OVENPAK[®] LE sizes

Typical burner data												
Fuel: natural gas at 60°F with 1000 Btu/ft ³ HHV - sg = 0.6 [1] Combustion air: 60°F - 21% O - 50% rel, bumidity - sg = 1.0 [1]												
Stated pressures are indicative. Actual pressures are a function of air humidity, altitude, type of fuel, and gas quality.												
	13 / 15 OP-LE	25 OP-LE	30 / 35 OP-LE	40 / 45 OP-LE	OP-LE EB40	OP-LE EB65						
Maximum capacity (MBtu/h) [2]	1.6	2.5	3.5	4.5	4.0	6.5						
Minimum capacity (Btu/h) [3]	32,000	50,000	70,000	90,000	40,000	65,000						
Maximum turndown [4]	50:1	50:1	50:1	50:1	100:1	100:1						

[1] sg (specific gravity) = relative density to air (density air =0.0763 lb/ft³(st))

[2] Capacity displayed assumes blower operation on 60Hz electrical supply. Gross output will be reduced by 17% if operated on 50Hz.

[3] Minimum capacity may be affected by fuel and application parameters.

[4] Turndown noted requires proper selection of gas regulators and proper sizing of fuel supply train.

Typical applications

OVENPAK[®] LE burner applications may include:

air heating in ovens and dryers

- paint finishing lines
- paper machines
- textile machines
- food baking ovens
- coffee roasters
- grain dryers
- other air heaters

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Dimensions and weights

Packaged Models

EB Models

- 1) Air pressure switch connection
- 2) Pilot gas inlet
- 3) Gas inlet
- 4) Blower
- 5) Flame sensor connection





Dimensions in inches unless stated otherwise												
Burner Model	А	В	С	D	E Standard	E Short	F	Weight Ib				
13	22.87	11.10	1.25	8.94		4.6	4.39	101				
15	26.70	11.10	1.25	8.94	12.0		4.39	101				
25	26.70	11.10	1.25	8.94			4.39	101				
30	27.65	12.59	1.38	10.08	- 16.0	8.75	5.44	180				
35	27.86	12.59	1.38	10.08			5.44	180				
40	27.86	12.59	1.38	10.08			5.44	180				
45	29.06	12.59	1.38	10.08			5.44	180				
EB40	10.69	11.10	1.25	8.94	12.0	4.6	4.39	45				
EB65	11.62	12.59	1.38	10.08	16.0	8.75	5.44	65				

Typical emissions

OVENPAK[®] LE Burners produce low levels of NOx and CO over a wide range of operation without sacrificing turndown or operational flexibility. Burner emissions can be controlled by adjusting the regulator at high fire position, and by adjusting the ratio tuning screw at lower firing position.

The OVENPAK[®] LE utilizes advanced mix combustion to effectively suppress the formation of prompt NOx. CO emissions are held at low levels through effective ratio control with minimal excess air.

Exact emissions performance may vary in your application. Contact MAXON for information on installation-specific estimates and guaranteed values. No guarantee of emissions is intended or implied without specific, written guarantee from MAXON.

Read "Specifications of OVENPAK[®] LE burners" for more detailed information on OVENPAK[®] LE burners.



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