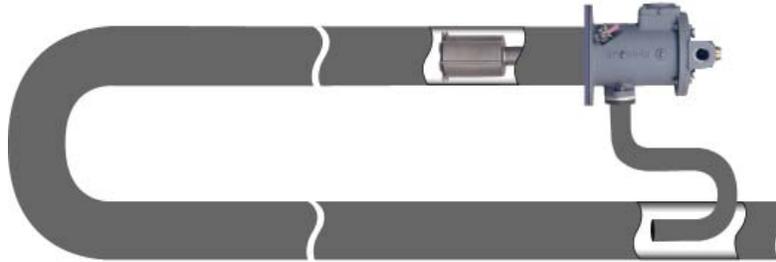


# North American Evenglow Radiant Tube Gas Burners

Bulletin 4723LNX



## The 4723LNX Evenglow Advantage:

- Low NOx without external FGR blowers**
- Low NOx retrofit using existing fuel/air ratio control components\***
- The burner body is plug compatible with the 4725 for easy retrofits**
- Provides the great features of the 4723 Evenglow**

- Rugged cast alloy flame retainer
- Adjustable heat release capabilities
- Adjustment controls on the backplate
- Multiple observation ports
- Direct spark igniter

## FEATURES

The 4723LNX Evenglow radiant tube burner is well suited for new and retrofit applications where low NOx radiant tube burner performance is desired. The patent-pending NOx reduction technique uses a simple recirculation tube to connect the burner to the exhausting leg of the radiant tube. Combustion air induces flue gases through the recirculation tube where it is progressively mixed in staged combustion zones providing simple, stable low NOx performance. No additional hardware is required.

4723LNX Evenglow burners include a built-in V-port fuel adjustment plug, multiple observation ports, a flanged air connection, and a gas connection that can be rotated in 90° increments. Ignition is provided by direct spark igniter. The igniter is held in place with a rugged yoke and can easily be loosened for field replacement.

The 4723LNX is dimensionally compatible with the 4725 series making retrofit of existing piping a simple task. The durability of the Evenglow family is retained with enhancements such as the cast alloy flame retainer and improved accessibility features of the backplate.

As with other Evenglow burners the 4723LNX will adapt to most radiant tube applications. Fuel is burned by a combination of diffusion flame and adjustable partial premix combustion. A simple, easy to access adjustment screw located on the backplate changes the amount of air premixed with the fuel, which lengthens or shortens the flame. This adjustment can be made while the burner is firing, without having to disassemble and adjust any of the burner internal parts.

The burner body and backplate are constructed of sturdy cast iron.

## AIR CAPACITY

Capacities in table shown below are for burners with 30% primary air. Burners are shipped with the primary air adjusting screw closed, corresponding to 20% primary air and 87.5% of table capacities. Wide open adjustment of primary air screw increases primary air to about 40% and total air capacity to about 117% of table figures. Primary air screw may require adjustment for smooth operation on some tube configurations.

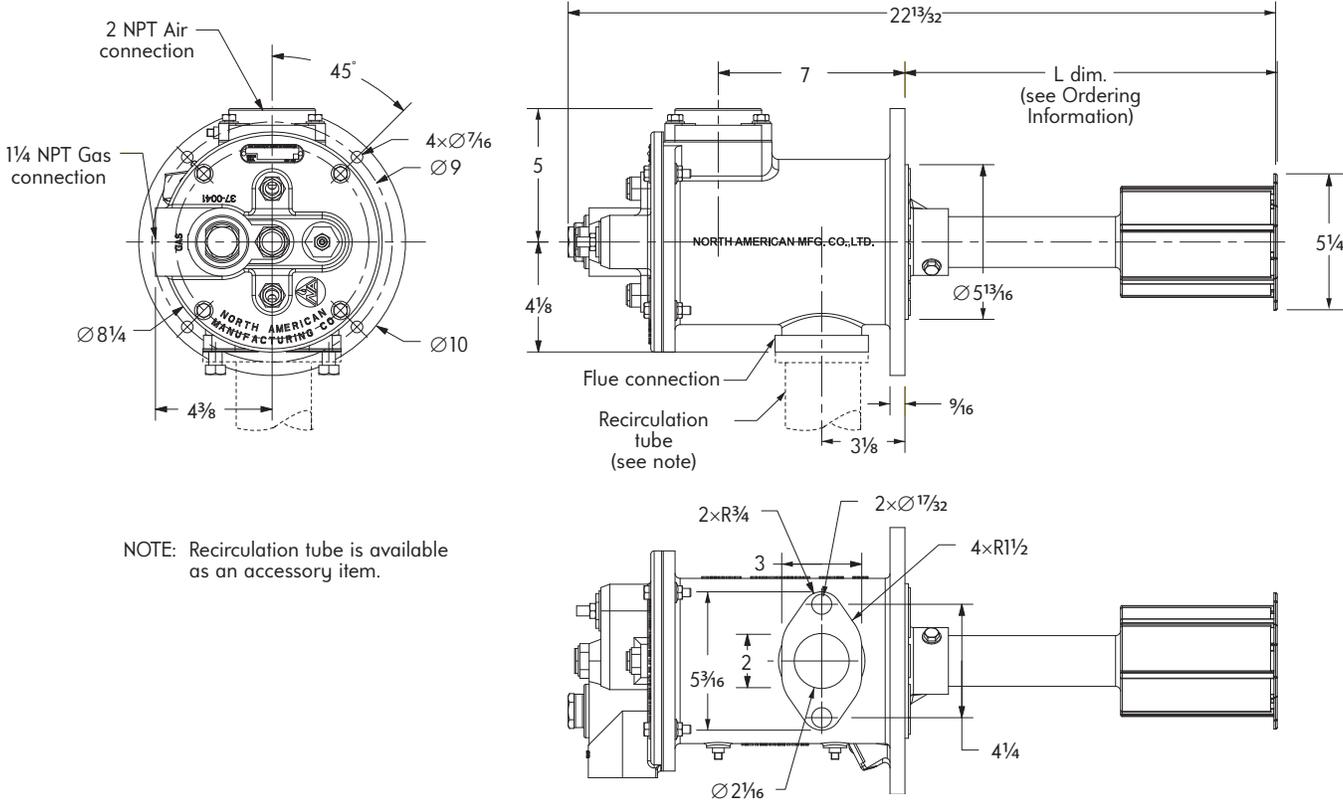
Burner designation	cfh Air Capacity with Air Pressure across the burner						Radiant Tube inside diameter
	0.2 osi	0.5 osi	1 osi	4 osi	9 osi	16 osi	
4723LNX-4-E	310	775	1080	2230	3575	4850	5¾" min to 6½" max

\* Fuel/air ratio should be checked and adjusted as necessary at start-up.

# NO<sub>x</sub> AND CO SUPPRESSION

The 4723LNX utilizes a number of NO<sub>x</sub> suppression techniques, including air staging and self-recirculated FGR (flue gas recirculation). Air staging works by adding the air to the fuel in controlled "stages" which delays combustion. The addition of FGR lowers the peak flame temperature by adding thermal ballast and by reducing the concentration of oxygen in the flame. Conventional FGR systems require an additional exhaust blower but the 4723LNX is able to self-entrain FGR directly from the exit of the radiant tube through a stainless steel recirculation tube. The patent pending technique of FGR injection maintains stable operation over a wide temperature range.

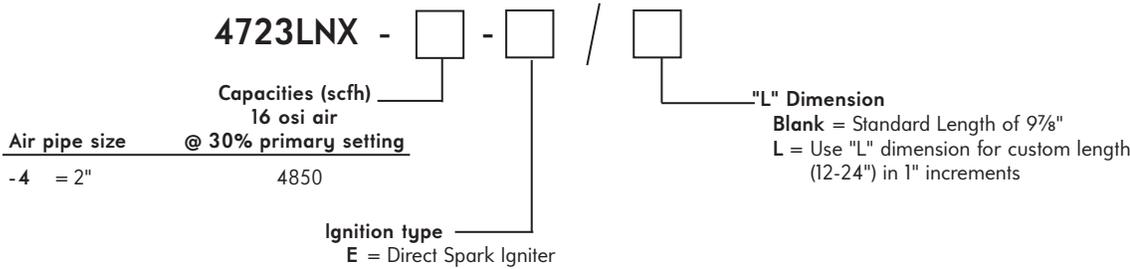
## DIMENSIONS inches



NOTE: Recirculation tube is available as an accessory item.

DIMENSIONS SHOWN ARE SUBJECT TO CHANGE. PLEASE OBTAIN CERTIFIED PRINTS FROM FIVES NORTH AMERICAN COMBUSTION. IF SPACE LIMITATIONS OR OTHER CONSIDERATIONS MAKE EXACT DIMENSION(S) CRITICAL.

## ORDERING INFORMATION



To order, specify: 4723LNX-4-E/(options).

Examples: 4723LNX-4-E Burner complete with direct spark igniter, standard length stabilizer, including gas cartridge.  
4723LNX-4-E/16 Burner complete with direct spark igniter, 16 inch "L" dimension, including gas cartridge.

**WARNING:** Situations dangerous to personnel and property may exist with the operation and maintenance of any combustion equipment. The presence of fuels, oxidants, hot and cold combustion products, hot surfaces, electrical power in control and ignition circuits, etc., are inherent with any combustion application. Parts of this product may exceed 160F in operation and present a contact hazard. Fives North American Combustion, Inc. urges compliance with National Safety Standards and Insurance Underwriters' recommendations, and care in operation.



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