KEYWARM®
We Ignite Success

LTS Positive Gas Infrared Tube Heater Series

LTV Vacuum Gas Infrared Tube Heater Series

LTV-X Vacuum Gas Infrared Integrated Tube Heater Series

HOW IT WORKS

Air (oxygen) and gas are mixed and burned in the burner. The flue flows along the radiation tube towards the end, simultaneously heating the radiation tube to a temperature range of 500 to 200°C. The radiation tube and reflector emit most of the heat in the form of infrared radiation, heating the objects and the ground beneath.

Advantages/Benefits

- Economic Benefits: Compared to boiler-based hydronic heating systems, it saves 25-35% of fuel annually.
- Simple control with a thermostat.
- Direct heating, no transmission loss.
- Reduction of thermal stratification.
- Instantaneous heating.
- Quiet and dust-free.
- Localized heating for specific areas.

Features

•Unique Reflector Design

The radiation tube emits heat in a circular 360° direction, and the reflector is designed to reflect the heat radiating upwards from the radiation tube downwards. Please refer to the diagram below.

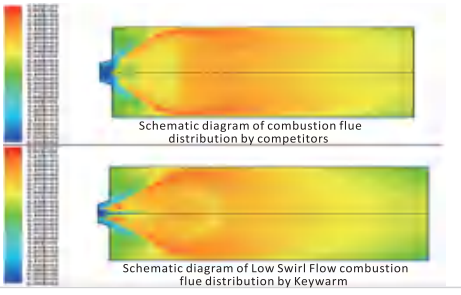
Parabolic reflector shape, 100% thermal radiation reflection effect (Keywarm)

Character-shaped reflector, with only 68% reflection efficiency (competitors)

- 12V low-voltage control system, 24V low-voltage gas valve, safe and reliable.

•Keywarm's Unique Combustion Technology

The world's most advanced cup-shaped cyclone heat exchange method and a unique air intake vortex premixing technology. The flue has a higher scrubbing speed along the inner wall of the tube, resulting in a longer residence time, and consequently, a relatively higher heat exchange efficiency.



Schematic diagram of combustion flue distribution by competitors

Schematic diagram of Low Swirl Flow combustion flue distribution by Keywarm

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Applications

- Large air exchange volume, poor sealing, and insulation in large spaces.
- Situations requiring spot, directional, and scheduled heating.
- Factories, warehouses, sports arenas, aircraft hangars, fire stations, auto repair shops, assembly lines, etc.

Installations

- Flue is usually discharged outdoors through a chimney. It can also be discharged indoors, but additional ventilation needs to be provided, such as meeting a ventilation rate of 0.5 air changes per hour in the building.
- Adherence to the manufacturer's specified "minimum distance from combustibles."
- Compliance with the manufacturer's recommended "minimum installation height."

Technical Parameter

LTS Positive Gas Infrared Tube Heater Series

Model	Input rate (kW)	Gas consumption		Recommended installation height(m)	Shipping weight (kg)	Total radiant tube length (m)	Radiant tube diameter (mm)	Power supply	Gas connection
		Natural gas (Nm^3/h)	Propane (kg/h)						
LTS10	10	1.06	0.8	2.4-3.0	37-55	3-6	101.6	220V 50Hz 60W	1/2"NPT
LTS(U)20	20	2.22	1.6	3.0-4.5	55-73	6-9			
LTS(U)30	30	3.33	2.3	4.2-5.4	73-91	9-12			
LTS(U)35	35	3.37	2.4	4.2-5.4	73-91	9-12			
LTS(U)40	40	3.86	3.2	4.8-6.9	91-109	12-15			
LTS(U)45	45	4.34	3.5	4.8-6.9	109-127	15-18			
LTS(U)50	50	4.83	4.0	5.1-7.5	109-127	15-18			

LTV Vacuum Gas Infrared Tube Heater Series

Model	Input rate (kW)	Gas consumption		Recommended installation height(m)	Shipping weight (kg)	Total radiant tube length (m)	Radiant tube diameter (mm)	Power supply	Gas connection
		Natural gas (Nm^3/h)	Propane (kg/h)						
LTV10	10	1.06	0.8	2.4-3.0	37-55	3-6	101.6	220V 50Hz 120W	1/2″NPT
LTV(U)20	20	2.22	1.6	3.0-4.5	55-73	6-9			
LTV(U)30	30	3.33	2.3	4.2-5.4	73-91	9-12			
LTV(U)35	35	3.37	2.4	4.2-5.4	73-91	9-12			
LTV(U)40	40	3.86	3.2	4.8-6.9	91-109	12-15			
LTV(U)45	45	4.34	3.5	4.8-6.9	109-127	15-18			
LTV(U)50	50	4.83	4.0	5.1-7.5	109-127	15-18			

LTV⁻X Vacuum Gas Infrared Integrated Tube Heater Series

Vacuum system model	Burner model (Quantity)	Input rate (kW)	Gas consumption		Radiant tube length(m), Diameter(mm)	Power supply Vacuum pump power	Gas connection for a single burner
			Natural gas (Nm^3/h)	Propane (kg/h)			
LTV100-2	LTV50(2)	100	9.66	7.8	30-36,101.6	220V 50Hz 370W	1/2″NPT
LTV200-4	LTV50(4)	200	19.32	15.6	60-72,101.6	220V 50Hz 750W	1/2″NPT

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