

LNS gas/oil burners

Are you looking for the quietest burner in the market?

Then you have come to the right place at Thermeta Service BV. Thermeta Service BV has produced burner systems for greenhouse farming, industry and utility since 1960. Despite the fact that the LN-series burner may absolutely be called low-noise, Thermeta Service BV has also developed a burner with a noise-insulating housing, the LNS-series (Low NO_x silent) burner.

Silent burner

The LNS burner has been developed to meet the demand of the consumers. The burner is particularly applied in environments requiring minimum noise. The LNS burner is a monoblock burner of the Low-NO_x Silent model. The fan and the burner housing have been combined into one whole and provided with a noise-insulating casing. The LNS-series burner is also called silent burner or silent worker.



The LN-series burner also has a very low NO_x emission. The Thermeta burners comply with the most recent **BEES** and **MIA/VAMIL** standards and meets the standards set for **Green Label**. This results in **extra points for the Green Label certificate** for greenhouse farming!

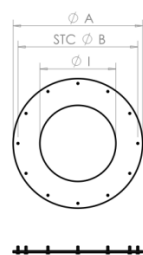
Scope of delivery

- Choice of many standard burner options.
- Recently developed LNS-series burner with a very low NO_x emission and a very stable, low-noise combustion as well as a large heat exchange power with low reverse box temperatures.
- The putting into operation of the burner (pre-purge) at low speed (or 30 Hz) saves energy and minimizes noise pollution.
- A very accurate adjustment of the gas-air ratio across the entire control range. The control does not involve any mechanical parts, thus ensuring a reliable, 100% reproduction-accurate control of the combustion. The controller measures the air pressure in the burner housing and based on this controls the gas pressure on the gas ports. Further, the controller is completely insensitive to any change in the position of the air valve or contamination of the fan, as this changes the air pressure in the burner housing and the gas pressure is corrected accordingly.
- In order to avoid standstill losses of the boiler, the air valves are fully closed when stopping the burner system.
- Default modulating capacity control (PID) through the burner panel or through an external control, for example a climate computer or building control.
- Burner and gas trains are entirely pre-wired, thus minimizing local mounting activities.
- A fan with optimum air production because of the ingeniously clever shape of the spiral housing and the fan blades. The fan can be equipped with a single-speed, two-speed or frequency-controlled motor.
- With the two-speed type fan the motor is optimally adjusted to the low-speed range. This results in very economic use of electric energy at a low speed.
- The frequency-controlled burner has been especially developed for an even more economic (40% compared with the two-speed motor) use of the required electric energy for the fan of the burner.
- The burner can also be provided with a combustion device for other gas-type fuels and oil (HBO), consisting of: oil transport pump/motor combination with the oil magnet valves, strainers and nozzles.
- The burner control has been secured with a flame detection system (based on an UV-cell) and various air and gas pressure switches.
- In the switch panel motor safety switches provide protection against overload and short circuit of the fan motor and oil pump/motor combination. Here no use is made of once-only used melting fuses.

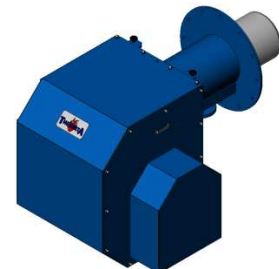
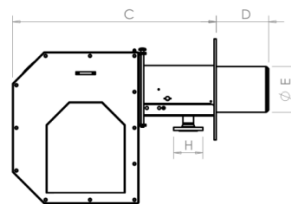
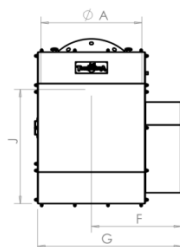
Type	Burner capacity (Mcal/u kW)	Vent. (kW)	Oil (L/h)	Gas (m ³ /h)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (PN-6)	I (mm)	J (mm)
LNS 5	500 582	1.1	55	70	500	450	970	297	212	409	659	DN40	223	516
LNS 7.5	750 872	1.5	85	105	500	450	1030	297	212	452	727	DN40	223	570
LNS 10	1.000 1.163	2.0	110	140	570	520	1080	297	260	456	731	DN50	272	570
LNS 12.5	1.250 1.454	3.0	140	175	570	520	1150	297	260	507	807	DN50	272	646
LNS 15	1.500 1.745	3.0	170	210	620	560	1225	297	320	507	807	DN80	332	646
LNS 17.5	1.750 2.035	4.0	200	245	620	560	1225	297	320	518	818	DN80	332	646
LNS 20	2.000 2.326	5.5	225	280	620	560	1302	297	320	591	941	DN80	332	700
LNS 25	2.500 2.908	5.5	280	350	660	620	1352	297	385	591	941	DN80	397	700
LNS 30	3.000 3.489	7.5	340	420	660	620	1352	297	385	629	979	DN80	397	700
LNS 35	3.500 4.071	7.5	390	490	825	755	1352	350	465	629	979	DN80	477	700
LNS 40	4.000 4.652	11	450	560	825	755	1433	350	465	725	1125	DN80	477	771
LNS 50	5.000 5.815	15	560	700	940	870	1532	373	540	761	1211	DN80	552	795
LNS 60	6.000 6.978	18.5	670	840	940	870	1532	373	540	806	1256	DN80	552	795

Larger capacities on request

Dimensions and technical data are subject to change without prior notice



BOILER FLANGE
LN 05 - 60
LN 70 - 160



Detailed drawings are available on request