

ProFire LNLLG Series Product Information
Vertical Configuration
< 30 PPM Combination Gas / #2 Oil
37.8 - 63.0 MMBtu



The LNXL series gas/oil combination burner is a forced draft packaged burner system. A backward curved impeller provides combustion air for various furnace pressures or high altitude applications. The rear-access cover is hinged for convenient inspection or service of the firing head components. Oil firing features a low pressure air atomizing design. An oil metering valve, rotary vane air compressor, and air atomizing nozzle are integral parts of this system.

Flue gas recirculation (FGR) is drawn through the burner blower assembly properly sized for the required NOx emission levels. An FGR control valve is positioned by the FGR system to provide FGR at all firing rates. The system is equipped with ANSI flanges to allow easy installation into the FGR piping.

The LNXL series is designed to provide less than 30 ppm NOx, corrected at 3% O₂ dry throughout the firing range when firing natural gas. CSD-1, GAP, FM, NFPA-85 and other regulatory agency control options are available.



STANDARD EQUIPMENT

- 120/1/60 Control Circuit
- Panel Signal Lights: Power On, Main Fuel, Ignition, and Flame Failure
- Burner Mounted Junction Box w/Remote Panel
- Combustion Air Proving Switch
- Air Dampers w/Silencer
- Burner Mounting Flange
- Gas-Electric Ignition
- Hinged Rear Access Cover
- Fuel Changeover Switch

SERIES FEATURES

S = STANDARD
 O = OPTIONAL
 N/A = NOT AVAILABLE

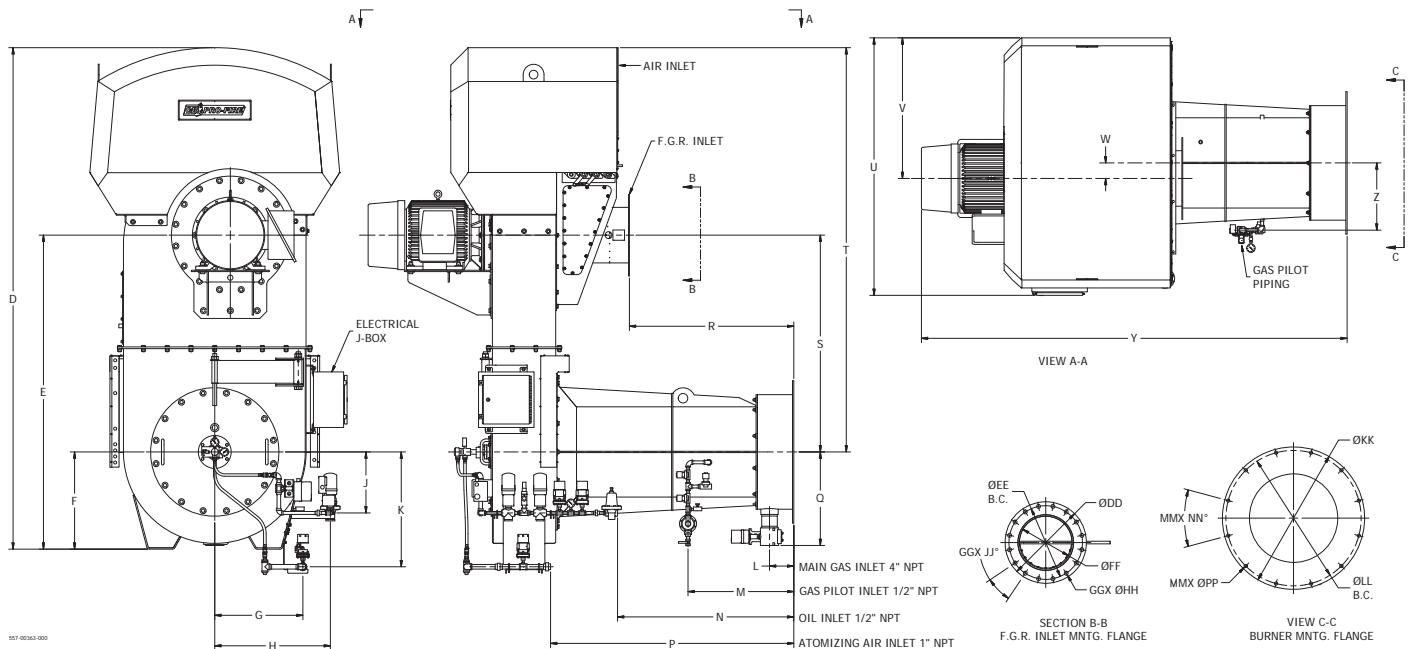
	LNLLG-378	LNLLG-462	LNLLG-546	
	LNLLG-420	LNLLG-504	LNLLG-588	LNLLG-630
Flame Safeguard with UV Scanner (IR Scanner Available)	S	S	S	S
3600 RPM Combustion Fan	S	S	S	S
Full Modulation Firing	S	S	S	S
Parallel Positioning System	S	S	S	S
Dry Oven	O	O	O	O
O ₂ Trim	O	O	O	O
Variable Frequency Drive (VFD)	O	O	O	O
High & Low Gas Pressure Switches	S	S	S	S
Normally Open (N.O.) Vent Valve	S	S	S	S
Main Gas Regulator & (2) Gas Shutoff Cocks	S	S	S	S
Gas Flow Control Valves Mounted on Burner Piping	S	S	S	S
2-Way Motorized Oil Valve w/ Proof of Closure (POC)	S	S	S	S
Burner Mounted Oil Flow Control Valve	S	S	S	S
Separately Mounted Air Compressor Module	S	S	S	S
3-Way Regulating Valve w/Relief Valve Upstream of Burner Oil Piping	S	S	S	S
High & Low Oil Pressure Switch	S	S	S	S
Atomizing Air Proving Switch & Fuel Oil Strainer (Shipped Loose)	S	S	S	S

SPECIFICATIONS & DIMENSIONS

BURNER MODEL	FRAME SIZE	GAS INPUT (MBH)	#2 OIL INPUT (GPH)	BHP @ 80% EFF.	MOTOR HP	SEPARATE COMP. MODULE MOTOR HP 3 PH.	BLOWER MOTOR VOLT/ PH 60 HZ.	FURNACE PRESS. ("W.C.)	GAS PRESSURE REQUIRED (PSI)	FGR LINE PIPING SIZE
LNLLG-378	1	37,800	270	900	40	15	460/3	6.0	10	14
LNLLG-420	1	42,000	300	1,000	50	15	460/3	7.2	10	14
LNLLG-462	1	46,200	330	1,100	60	15	460/3	7.5	10	14
LNLLG-504	2	50,400	360	1,200	60	15	460/3	7.7	10	16
LNLLG-546	2	54,600	390	1,300	75	15	460/3	8.1	10	16
LNLLG-588	2	58,800	420	1,400	75	15	460/3	8.4	10	16
LNLLG-630	2	63,000	450	1,500	100	15	460/3	9.6	10	16

NOTES:

1. Gas input based on natural gas at 1,000 Btu/cu.ft. and 0.60 gravity.
2. Gas pressure based on zero furnace pressure. For total pressure at manifold, add furnace pressure.
3. Oil input based on No. 2 oil at 140,000 Btu/gal.
4. Boiler overall efficiency of 80% estimated.
5. Blower wheel and motor HP is based on altitude up to 2,000 ft. above sea level. For higher altitude or 50 Hz. applications, consult factory.
6. Firing at higher furnace pressures de-rates the burner by approximately 5% per 1/2" of additional pressure, consult factory.
7. Other motor voltages available, consult factory.



STANDARD CONFIGURATION

BURNER MODEL	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U
SIZE 1	137 1/4	83 3/8	26 5/8	24	31 3/4	17 5/8	34	6 5/8	28	50 7/8	70 1/8	23 3/8	46	56 3/4	110 3/4	72 3/8
SIZE 2	144 1/2	90 1/2	28	25 1/2	33 3/8	17 5/8	33 1/8	7	30 1/2	50 7/8	70 1/8	27	47 1/2	62 1/2	116 1/2	74 1/4

BURNER MODEL	V	W	Y	Z	DD	EE	FF	GG	HH	JJ	KK	LL	MM	MN	PP
SIZE 1	38 1/2	3 5/8	113 1/4	16 1/8	21	18 3/4	13 1/4	24	1 1/8	15°	30	28 1/4	12	30°	1
SIZE 2	40 1/2	4 1/2	122 3/4	19 3/8	23 1/2	21 1/4	15 1/4	16	1 1/8	22 1/2°	41	39	12	30°	1