

# Forced Draft Industrial Package Burner

MODEL : **ZFG**

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**ZFG Gas burners** are ideal for lower temperature applications such as baking, drying and curing applications. standard burners include an integral combustion air blower, ignition electrode, flame rod and other features that simplify installation and operation.



## FEATURES

- a) Round flame
- a) Cast iron burner housing and stainless steel diffuser
- b) Integral blower (external blower can also be used based on customers demand)
- c) Fires natural gas or LPG
- d) Low gas pressure required
- e) Low air pressure required
- f) Wide operating range
- g) turn down ratio equals 8:1 to 50:1
- h) Low NOx emissivity
- i) Each burner equipped with its own damper, actuator, flame rod and ignition electrode

## OPERATION

Burners can be lighted at rich, lean, or correct air/fuel ratio, then immediately turned to high fire. Required gas pressures are low for natural gas.

During process interruptions, burner can idle at very low fuel rates, eliminating need for burner shut down and time- consuming restarts.

## EXCESS AIR

Excess air improves temperature uniformity by avoiding hot spots in front of burners, churning furnace atmosphere to reduce stratification, and creating positive furnace pressure to eliminate cold air infiltration.

Excess air can give very high effective burner turn down. Thus a furnace used for high temperature work (Up to 600°C) with burners firing on stoichiometric air/fuel ratio can also be used for low temperature jobs with burners firing on lean ratio.

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FUEL CONVERSION OF BOILERS & FURNACES, DESIGN , CONSULTATION AND INSTALLATION

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Burner Model	Kcal/hr at 70 mbar (air pressure)	Flame Length(cm)
		GAS
<b>50 ZFG</b>	50,000	50
<b>120 ZFG</b>	120,000	56
<b>250 ZFG</b>	250,000	63
<b>500 ZFG</b>	500,000	77
<b>800 ZFG</b>	800,000	90
<b>1500 ZFG</b>	1,500,000	121
<b>2500 ZFG</b>	2,500,000	240

## CONSTRUCTION FEATURES

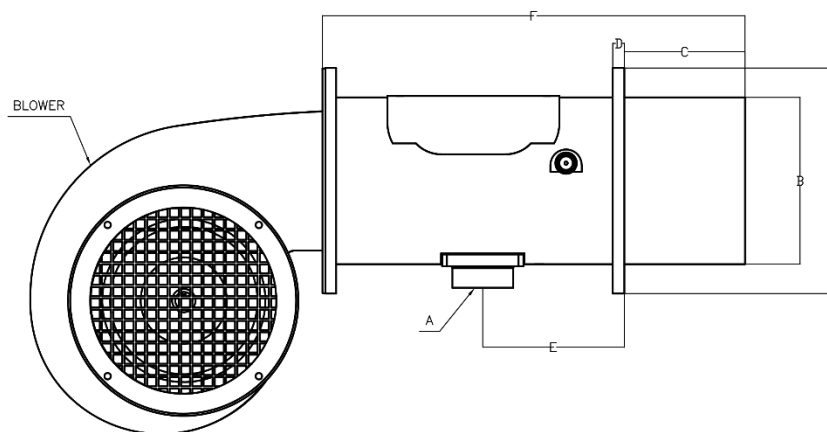


Figure 1: Schematic of ZFG burner

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Burner Model	A in	B mm	C mm	D mm	E mm	F mm	G mm
<b>50 ZFG</b>	1/2	170	123	13	145	428	230
<b>120 ZFG</b>	3/4	170	123	13	145	428	230
<b>250 ZFG</b>	1	170	123	13	145	428	230
<b>500 ZFG</b>	1.1/2	204	123	14	142	455	275
<b>800 ZFG</b>	1.1/2	204	123	14	142	455	275
<b>1500 ZFG</b>	2	306	163	15	246	667	385
<b>2500 ZFG</b>	3	350	200	12	250	713	500

## PARTS AND INSTRUMENTATION DIAGRAM SAMPLE

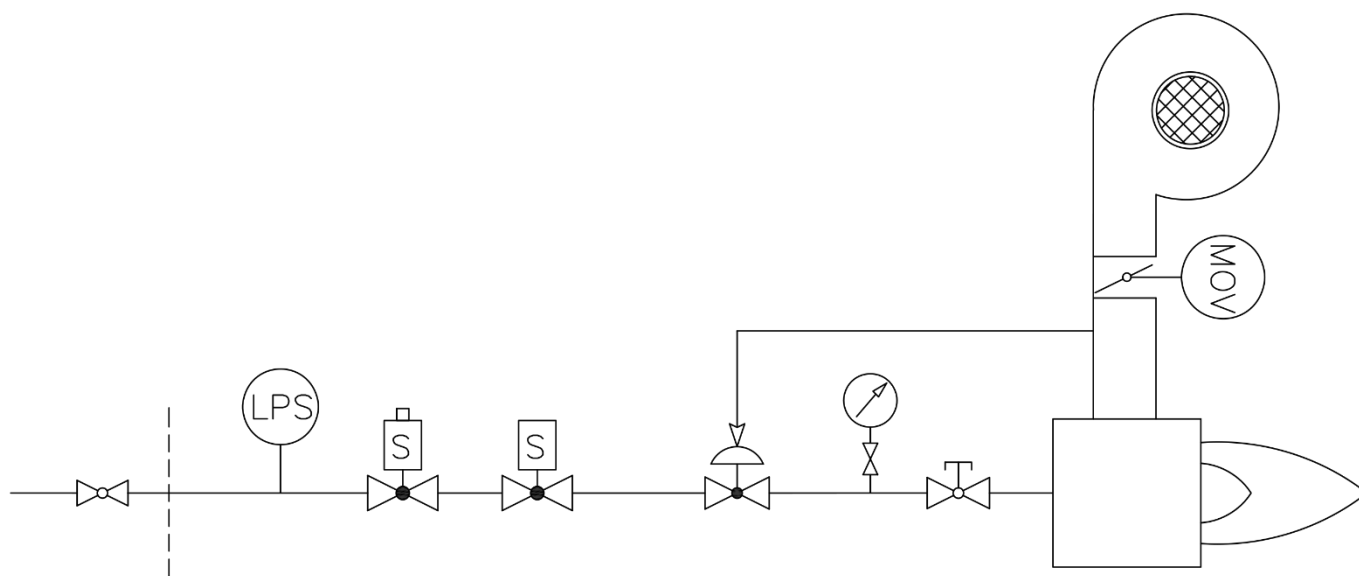


Figure 2: Suggested pinping arrangement for ZFG burner



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