

Type FD68 and FD68-LN-RF Burners With Remote Fan



KEY FEATURES:

- For watertube and larger firetube boilers
- Combination gas & oil fuel firing capability
- Low emissions package (FD68-LN only)
- Efficient, low excess air combustion.
- Alternative & renewable fuel firing capability: bio-gas, bio-diesel, yellow grease, etc.

DESCRIPTION:

The Johnson FD-series remote fan burner is designed for watertube boiler applications as well as large capacity firetube boiler applications with high static pressure (draft loss). Type FD68-RF combustion systems are available for standard emissions, while FD68-LN-RF packages are designed for sub-30 ppm NO_x requirements.

The remote fan burner package is available in a range of capacities and configurations to suit most firetube and watertube designs. The combustion air system is custom engineered to provide flexibility and the best possible fan performance for a given application. The locations of the air and fuel inlets are adaptable to existing boiler room spaces.

All systems are designed and packaged for a single-source solution. Standard features include flame safeguard control, remote mounted combustion air fan with a premium efficiency motor, gas-electric ignition system, pilot gas train, main gas train, gas pressure regulator, and refractory burner tile. An oil train with supply pump, strainer and atomizing air compressor are furnished when applicable. The burner windbox includes a hinged access door and a flame observation port.

Type FD68-LN low NO_x systems include parallel-positioning fuel-air ratio control, an induced FGR inlet, FGR control valve with companion flange. All systems can be supplied with a host of energy-saving options such as a variable speed drive, O₂ trim, multiple boiler lead-lag sequencing, draft control, and touchscreen human-machine interface (HMI) for boiler management, status, and communications.



FD68-RF and FD68-LN-RF series burners are designed to fire a combination of fuels including:

- Natural, LP and other gaseous fuels
- No. 2 to 6 fuel oils
- Renewable fuels such as digester gas, town gas, bio-diesel, tallow and others.

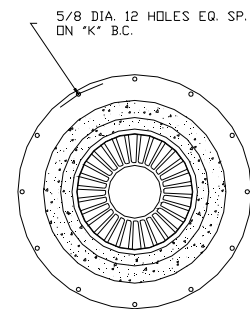
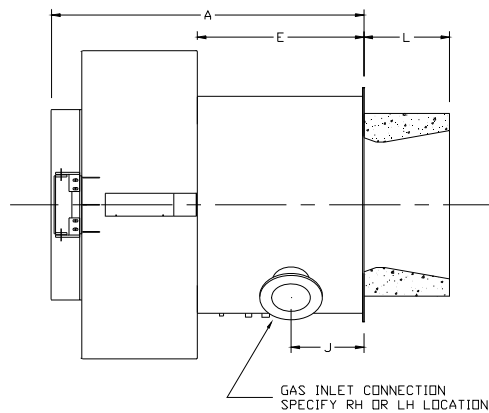
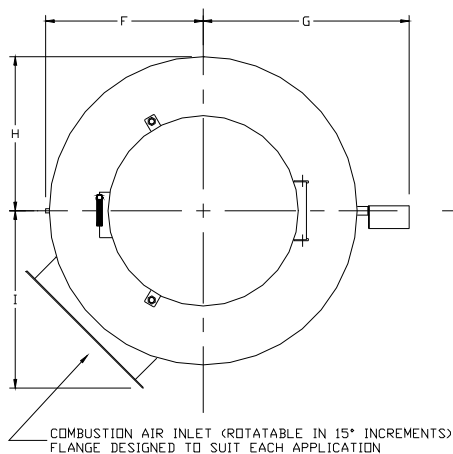
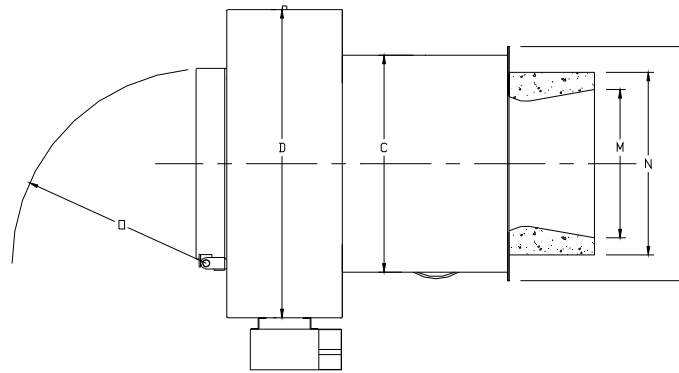
Available capacities:

**800 to 1500 boiler HP.
32,700 to 63,000 MBTU/Hr.**

Johnson FD68-RF remote fan systems are available for large capacity boilers with combination and alternative fuel capability.

FD68-LN-RF systems include an FGR system for low NO_x applications.

JOHNSON FD68-RF & FD68-LN-RF Burners Capacities & Specifications



Burner Size	MBTU/Hr	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
800	32,700	55	41	38	53.88	29.25	27.63	36.13	27	*	12.88	19.75	13.5	20.25	23.75	34.13
900	36,800	55	41	38	53.88	29.25	27.63	36.13	27	*	12.88	19.75	13.5	23.75	28	34.13
1000	40,900	55	41	38	53.88	29.25	27.63	36.13	27	*	12.88	19.75	13.5	23.75	28	34.13
1100	45,000	55	41	38	53.88	29.25	27.63	36.13	27	*	12.88	19.75	13.5	23.75	28	34.13
1200	49,000	55	41	38	53.88	29.25	27.63	36.13	27	*	12.88	19.75	13.5	26	32	34.13
1300	53,100	55	41	38	53.88	29.25	27.63	36.13	27	*	12.88	19.75	13.5	26	32	34.13
1500	63,000	**	45	42	58	**	29.63	37.5	29	*	13	21.5	**	**	**	36

* Combustion air fans are selected on an individual basis according to static pressure requirement, emissions and elevation. For that reason, fan dimensions and the corresponding air duct dimensions are not shown.

** Consult factory.

Note: Burner dimensions and locations of valves and ducts represent basic design only. Actual design may vary according to job requirements.

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FD68-RF-I Rev 11/2009

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