

POWER FLAME® PROCESS/HVAC BURNER

DIRECT OR INDIRECT FIRED AIR HEATING GAS BURNER TYPE FD/FDM

30,000-3,500,000 BTU

Welded steel construction for durability and reliable service.

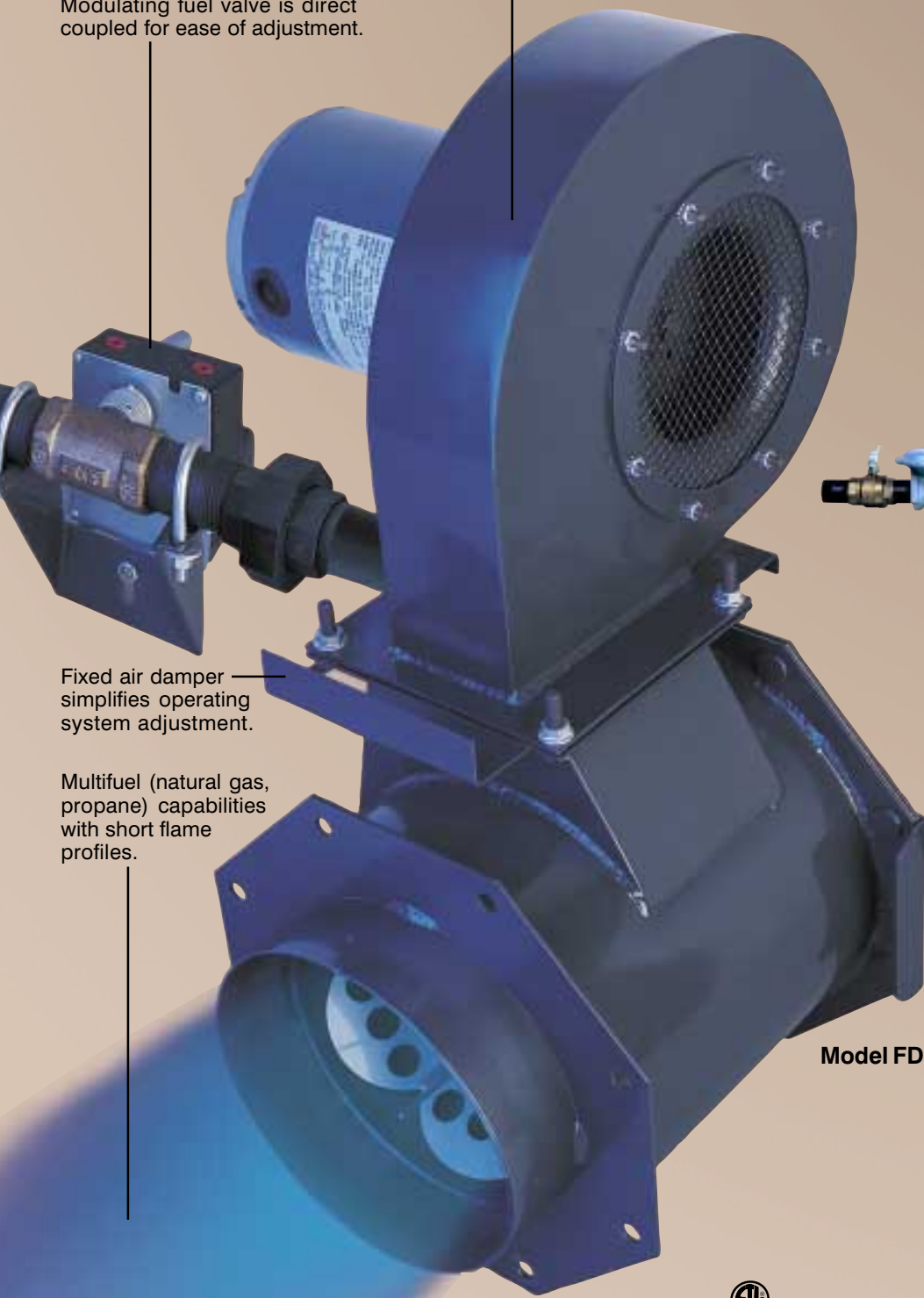
Modulating fuel valve is direct coupled for ease of adjustment.

Fixed air damper — simplifies operating system adjustment.

Multifuel (natural gas, propane) capabilities with short flame profiles.

The Power Flame® Type FD Burner is designed to fire process heating appliances or air handling systems that require direct or indirect heating of the air stream. The direct fired, fixed air Model FD is capable of firing either in line or at 90° to the process air flow with turndowns of 30:1 or greater. The indirect fired, modulating air Model FDM is capable of maintaining on-ratio control over a 20:1 turndown. Its reliable direct spark ignition, high combustion efficiencies and low maintenance make this burner suitable for a wide range of process and air heating applications.

Prepiped and prewired gas trains are available as part of an integrated combustion package that can be configured to meet local/national codes or customer specified requirements.



Model FD



Advanced technology combustion head maintains excellent flame stability while producing high turndowns.



Power Flame

The Power to Manage Energy



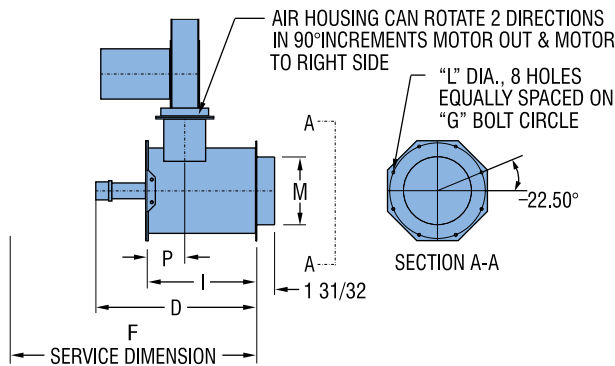
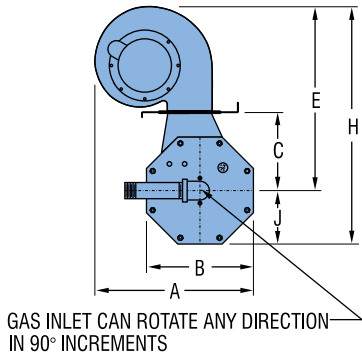
Model FDM-modulating pie shaped dampers allow close control of air/fuel ratios over a 20:1 turndown for special gas fired air handling applications.

STANDARD AND OPTIONAL EQUIPMENT

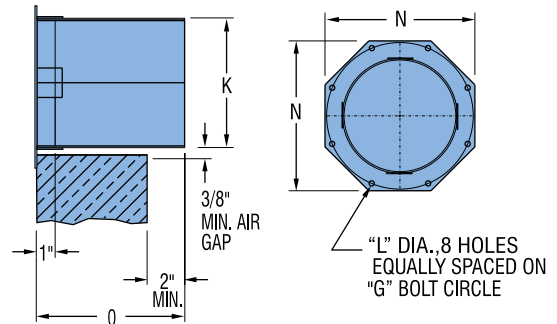
X-Standard O-Optional N/A-Not Applicable

	FD	FDM
3450 RPM Fan Motor	X	X
Connections for Combustion Air Switch	X	X
Fixed Combustion Air Damper	X	N/A
Modulating Combustion Air Damper	O	X
Flame Rod	X	X
UV Scanner	O	O
Ignition Electrode	X	X
Modulating Butterfly Gas Valve	X	X
Ignition Transformer	O	X
Modulating Motor	O	X
Combustion Flow Air Switch	O	X
Combustion Control System	O	X
Prepiped and Prewired Gas Trains	O	O
Alternate Mode of Operation (On-Off, Low-High-Off, Low-High-Low)	O	O
Custom Control Panels	O	O
Wall Penetration Protection Sleeve (For High Velocity Air Streams)	O	O

MODEL FD



OPTIONAL WALL PROTECTION SLEEVE



DIMENSIONS (Inches) Standard Models.

RATINGS & SPECIFICATIONS

Burner Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Blower Motor H.P. (3450 RPM)	Capacity (BTU/Hr)			Gas Pressure Required ²
																		Max ¹	Natural Gas FD Min	FDM Min	
FD75	14 ¹ / ₃₂	9 ¹ / ₁₆	5 ¹⁵ / ₁₆	12 ⁷ / ₈	15 ²³ / ₃₂	25	8 ⁷ / ₈	20 ⁹ / ₃₂	8	4 ⁹ / ₁₆	6 ⁷ / ₈	7 ¹ / ₁₆	5 ⁹ / ₃₂	9 ¹ / ₁₆	7 ⁷ / ₈	3 ¹ / ₄	1/4	750,000	30,000	37,500	2.8" W.C.
FD150	16 ³ / ₈	11	6 ⁷ / ₈	15 ¹ / ₄	17 ²⁵ / ₃₂	32 ¹ / ₄	10 ⁹ / ₁₆	23 ⁹ / ₃₂	9 ¹ / ₂	5 ¹ / ₂	8 ⁷ / ₁₆	7 ¹ / ₁₆	7 ¹ / ₂	11	9 ²⁷ / ₃₂	4 ¹ / ₄	1/3	1,500,000	50,000	75,000	2.1" W.C.
FD225	17 ⁹ / ₁₆	13 ³ / ₈	9 ¹ / ₈	17 ¹ / ₄	20 ¹ / ₁₆	36 ¹⁵ / ₁₆	13	26 ³ / ₄	12 ¹ / ₁₆	6 ¹¹ / ₁₆	10 ⁵ / ₈	7 ¹ / ₁₆	9 ⁷ / ₁₆	13 ³ / ₈	11 ¹³ / ₁₆	4	1/2	2,250,000	75,000	112,500	2.0" W.C.
FD300	18 ³ / ₄	15 ¹ / ₂	11 ³ / ₁₆	18 ⁷ / ₁₆	22 ³ / ₁₆	40 ⁵ / ₈	15	29 ¹⁵ / ₁₆	13 ¹⁵ / ₁₆	7 ³ / ₄	12 ³ / ₈	1/2	11	15 ¹ / ₂	13 ¹¹ / ₁₆	7 ³ / ₄	3/4	3,000,000	90,000	150,000	1.9" W.C.
FD350	18 ³ / ₄	15 ¹ / ₂	11 ³ / ₁₆	18 ⁷ / ₁₆	22 ³ / ₁₆	40 ⁵ / ₈	15	29 ¹⁵ / ₁₆	13 ¹⁵ / ₁₆	7 ³ / ₄	12 ³ / ₈	1/2	11	15 ¹ / ₂	13 ¹¹ / ₁₆	7 ³ / ₄	1 1/2	3,500,000	105,000	175,000	3.7" W.C.

1. PFI certified capacities listed are based on balanced (-0" W.C.) draft conditions.
2. Pressure required at the gas inlet to the firing head to obtain maximum rate.



Power Flame Incorporated

2001 South 21st Street Phone 620-421-0480
Parsons, KS 67357 Fax 620-421-0948

Web Site: <http://www.powerflame.com>

E-Mail: csd@powerflame.com