

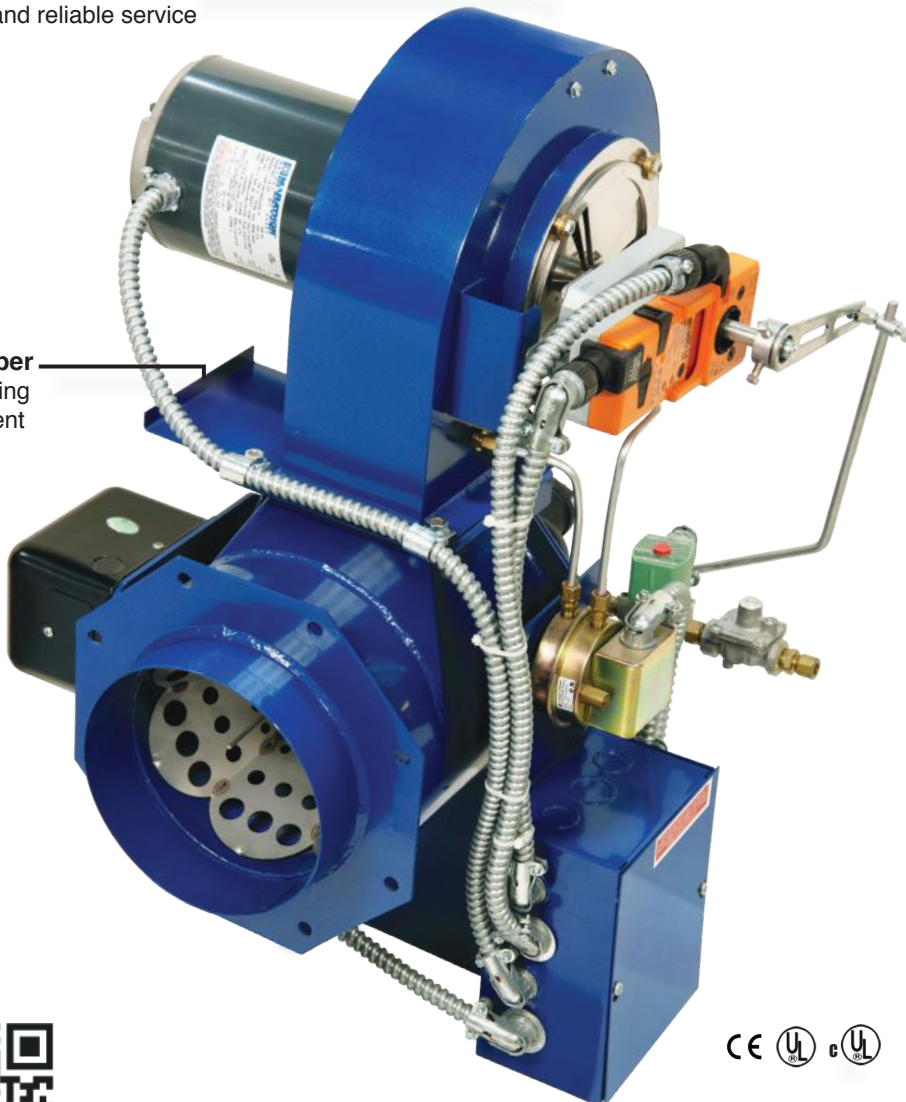
## Type FD/FDM

**GAS:**  
30,000 – 5,000,000 BTU

**PROCESS / HVAC BURNERS**  
Direct or Indirect Fired Air Heating Gas Burners

**Welded Steel Construction**  
for durability and reliable service

**Fixed Air Damper**  
simplifies operating  
system adjustment



The Power Flame® Type FD/FDM Burners are 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 40:1 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. Piped and prewired gas trains are available as part of an integrated combustion package that can be configured to meet local/national codes or customer specific requirements.



**CALL US:** 620-421-0480  
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**POWER FLAME INCORPORATED**  
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## STANDARD AND OPTIONAL EQUIPMENT

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

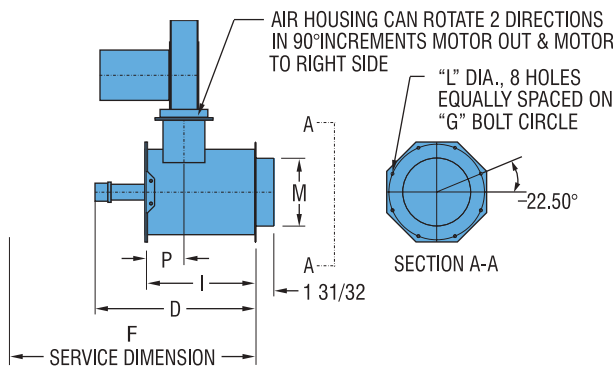
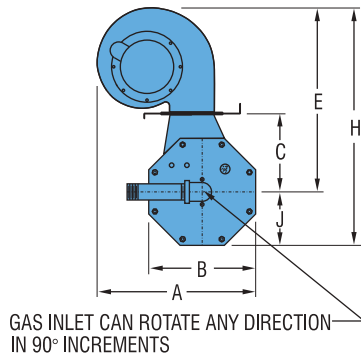
	FD	FDM
3450 RPM Fan Motor	X	X
Connections for Combustion Air Switch	X	X
Fixed Combustion Air Damper	X	N/A
Modulating Combustion Air Damper	O	X
Flame Rod	X	X
UV Scanner	O	O
Ignition Electrode	X	X
Modulating Butterfly Gas Valve	X	X
Ignition Transformer	O	X
Modulating Motor	O	X
Combustion Flow Air Switch	O	X
Combustion Control System	O	X
Prepped 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

Note: FD Models are ETL Approved and FDM Models are UL Approved

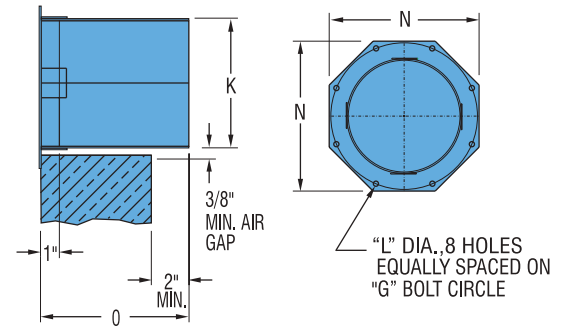


Model FDM-modulating pie shaped dampers allow close control of air/fuel ratios over a 20:1 turndown for special gas fired air handling applications.

### 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) Natural Gas			Gas Pressure Required <sup>2</sup>
																		Max <sup>1</sup>	FD Min	FDM Min	
FD/FDM75	14 <sup>1</sup> / <sub>32</sub>	9 <sup>1</sup> / <sub>16</sub>	5 <sup>15</sup> / <sub>16</sub>	12 <sup>7</sup> / <sub>8</sub>	15 <sup>23</sup> / <sub>32</sub>	25	8 <sup>7</sup> / <sub>8</sub>	20 <sup>9</sup> / <sub>32</sub>	8	4 <sup>3</sup> / <sub>16</sub>	6 <sup>7</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>16</sub>	5 <sup>29</sup> / <sub>32</sub>	9 <sup>1</sup> / <sub>16</sub>	7 <sup>7</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>4</sub>	1/4	750,000	30,000	37,500	2.8" W.C.
FD/FDM150	16 <sup>3</sup> / <sub>8</sub>	11	6 <sup>7</sup> / <sub>8</sub>	15 <sup>1</sup> / <sub>4</sub>	17 <sup>25</sup> / <sub>32</sub>	32 <sup>1</sup> / <sub>4</sub>	10 <sup>9</sup> / <sub>16</sub>	23 <sup>9</sup> / <sub>32</sub>	9 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	8 <sup>3</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>2</sub>	11	9 <sup>27</sup> / <sub>32</sub>	4 <sup>1</sup> / <sub>4</sub>	1/3	1,500,000	50,000	75,000	2.1" W.C.
FD/FDM225	17 <sup>9</sup> / <sub>16</sub>	13 <sup>3</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>8</sub>	17 <sup>1</sup> / <sub>4</sub>	20 <sup>1</sup> / <sub>16</sub>	36 <sup>15</sup> / <sub>16</sub>	13	26 <sup>3</sup> / <sub>4</sub>	12 <sup>1</sup> / <sub>16</sub>	6 <sup>11</sup> / <sub>16</sub>	10 <sup>5</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>16</sub>	9 <sup>7</sup> / <sub>16</sub>	13 <sup>3</sup> / <sub>8</sub>	11 <sup>13</sup> / <sub>16</sub>	4	1/2	2,250,000	75,000	112,500	2.0" W.C.
FD/FDM300	18 <sup>3</sup> / <sub>4</sub>	15 <sup>1</sup> / <sub>2</sub>	11 <sup>3</sup> / <sub>16</sub>	18 <sup>7</sup> / <sub>16</sub>	22 <sup>3</sup> / <sub>16</sub>	40 <sup>5</sup> / <sub>8</sub>	15	29 <sup>15</sup> / <sub>16</sub>	13 <sup>15</sup> / <sub>16</sub>	7 <sup>3</sup> / <sub>4</sub>	12 <sup>3</sup> / <sub>8</sub>	1/2	11	15 <sup>1</sup> / <sub>2</sub>	13 <sup>11</sup> / <sub>16</sub>	7 <sup>3</sup> / <sub>4</sub>	3/4	3,000,000	90,000	150,000	2.4" W.C.
FD/FDM350	18 <sup>3</sup> / <sub>4</sub>	15 <sup>1</sup> / <sub>2</sub>	11 <sup>3</sup> / <sub>16</sub>	18 <sup>7</sup> / <sub>16</sub>	22 <sup>3</sup> / <sub>16</sub>	40 <sup>5</sup> / <sub>8</sub>	15	29 <sup>15</sup> / <sub>16</sub>	13 <sup>15</sup> / <sub>16</sub>	7 <sup>3</sup> / <sub>4</sub>	12 <sup>3</sup> / <sub>8</sub>	1/2	11	15 <sup>1</sup> / <sub>2</sub>	13 <sup>11</sup> / <sub>16</sub>	7 <sup>3</sup> / <sub>4</sub>	1 1/2	3,500,000	105,000	175,000	3.7" W.C.
FD/FDM500	N/A	20 <sup>25</sup> / <sub>32</sub>	12 <sup>3</sup> / <sub>8</sub>	21 <sup>23</sup> / <sub>32</sub>	28	41 <sup>1</sup> / <sub>32</sub>	19 <sup>1</sup> / <sub>2</sub>	39 <sup>1</sup> / <sub>16</sub>	15 <sup>21</sup> / <sub>32</sub>	11 <sup>1</sup> / <sub>16</sub>	N/A	N/A	5 <sup>1</sup> / <sub>8</sub>	12 <sup>1</sup> / <sub>16</sub>	N/A	5 <sup>3</sup> / <sub>32</sub>	3	5,000,000			6.8" W.C.

NOTES: 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.

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