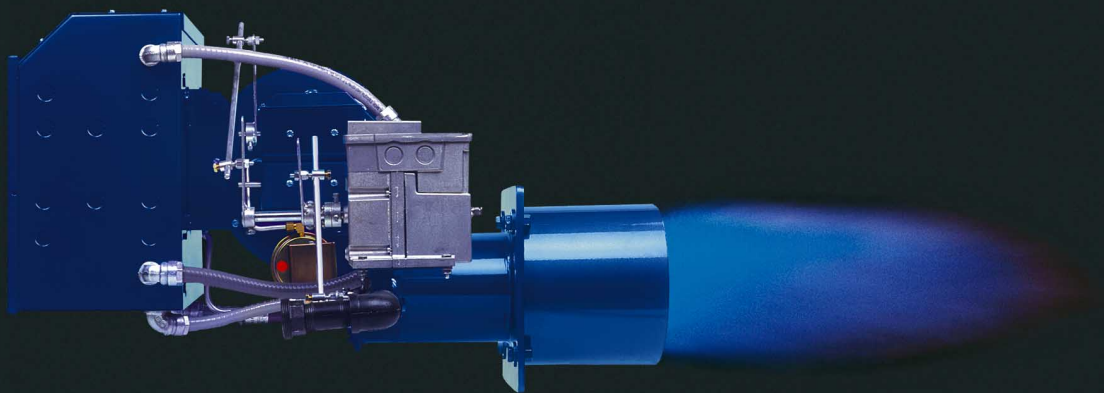


TYPE JA HTD  
HIGH TURNDOWN  
FORCED DRAFT  
BURNERS

GAS

50,000-  
2,200,000  
BTU/HR.

# Power Flame<sup>®</sup> Type JA HTD



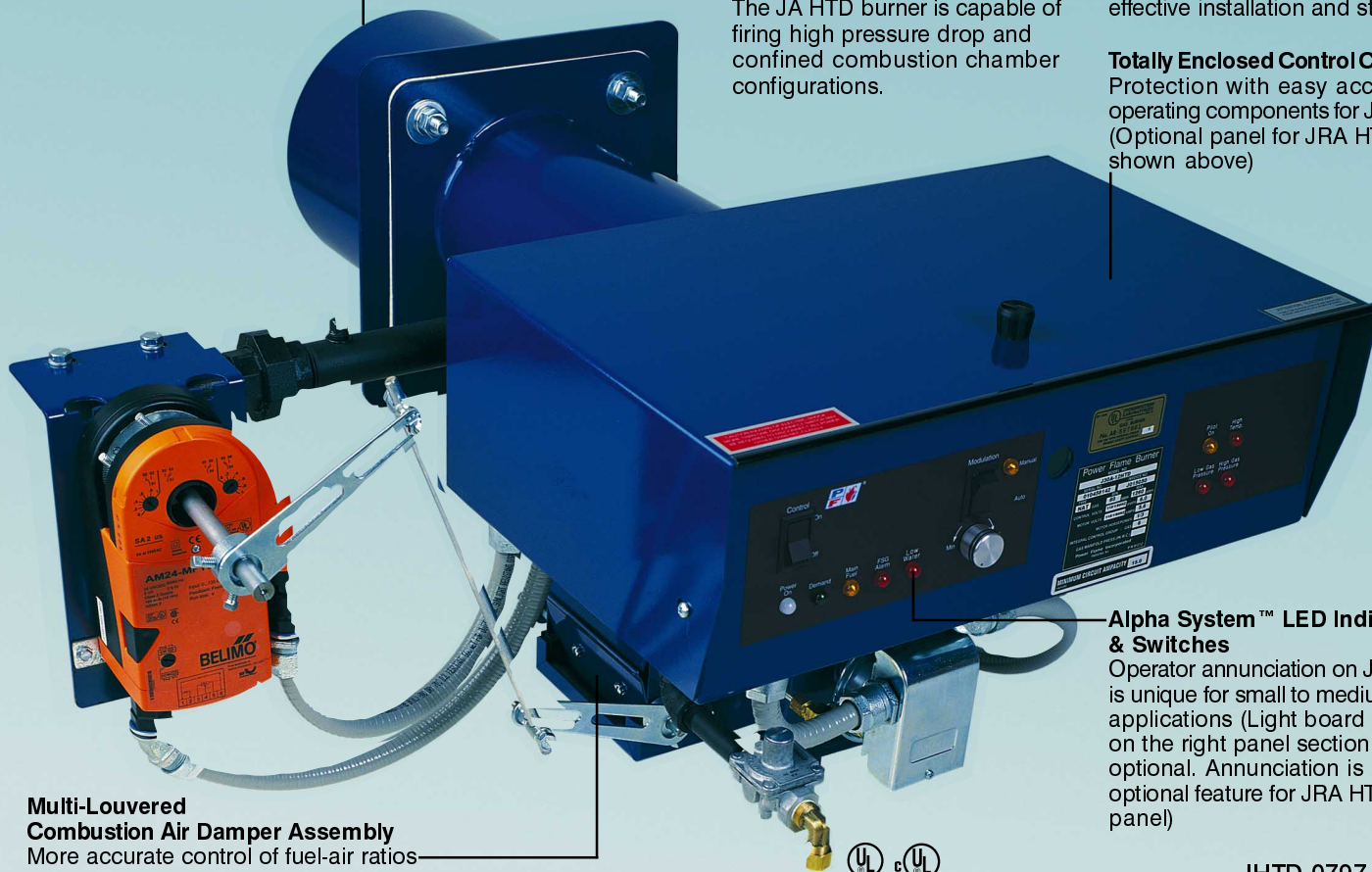
**Power Flame's Versatile Small to Medium Range High Turndown Gas Burner**

The Power Flame Type JA HTD burner presents optimum, state-of-the-art design for maximum combustion efficiency and operating dependability. These packaged combustion systems will fire natural gas at turndowns of 10 to 1 or higher. The flame retention firing head incorporates a premix combustion zone with stainless steel, multiport diffuser to produce full range stable performance in both positive and negative combustion chambers. The JA HTD burner is capable of firing high pressure drop and confined combustion chamber configurations.

Operating system adjustments have been minimized to provide trouble-free start up and operating performance. The integrally mounted control cabinet on the JA HTD (optional on the JRA HTD) provides annunciation features usually found on larger industrial size systems. The modular design produces added flexibility in the choice of optional features. All Power Flame packaged combustion systems are factory fire-tested to ensure cost effective installation and start up.

**Circular Furnace Opening**  
No special cutting of combustion chamber front plate

**Totally Enclosed Control Cabinet**  
Protection with easy access to operating components for JA HTD (Optional panel for JRA HTD shown above)



**Multi-Louvered Combustion Air Damper Assembly**  
More accurate control of fuel-air ratios

**Alpha System™ LED Indicators & Switches**  
Operator annunciation on JA HTD is unique for small to medium size applications (Light board shown on the right panel section is optional. Annunciation is an optional feature for JRA HTD with panel)



# Power Flame

*The Power to Manage Energy*

## STANDARD EQUIPMENT

- 3450 RPM Motor, squirrel cage blower, cabinet with Alpha System™ LED Indicators (Power, Demand, Main Fuel, FSG Alarm, Customer Selectable), and control switch (A)
- Leakage test, pilot and main gas cocks
- Gas electric pilot and gas ignition transformer
- Pilot and main gas pressure regulators (14 in. W.C. inlet max)
- Flame safeguard with UV scanner, intermittent pilot and prepurge
- Air safety switch
- Adiabatic chamber\*

## ADDED FEATURES

X-Standard O-Optional

- Prepiped and prewired gas train
- Rear or top MTD control panel on JRA
- Flame safeguard and interrupted pilot
- On-Off diaphragm gas valve with separate gas pressure regulator
- Solenoid safety gas valve
- Modulation with automatic air control - 135 OHM signal std.
- Manual potentiometer with Manual-Automatic selection switch
- One (1) proof of closure valve can replace the two (2) STD gas valves
- Customized control systems and accessories



Model JR HTD shown with optional prewired, prepiped gas train and control panel.



Standard JA HTD with stainless steel flame retention firing head and adiabatic chamber.

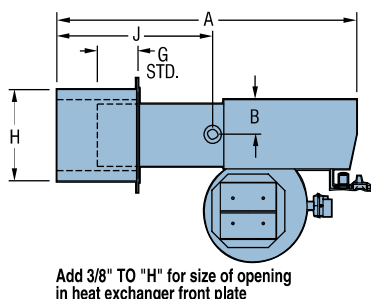
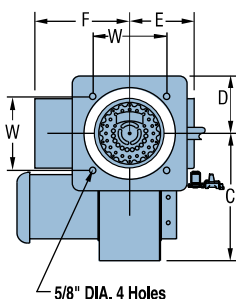
|   | J15A-10 HTD<br>J30A-10 HTD<br>J30A-12 HTD | J50A-15 HTD |
|---|---|-------------|
| Prepiped and prewired gas train                                       | O   | O           |
| Rear or top MTD control panel on JRA                                  | O   | O           |
| Flame safeguard and interrupted pilot                                 | O   | O           |
| On-Off diaphragm gas valve with separate gas pressure regulator       | X   | X           |
| Solenoid safety gas valve   | X   | X           |
| Modulation with automatic air control - 135 OHM signal std.           | X   | X           |
| Manual potentiometer with Manual-Automatic selection switch           | X   | X           |
| One (1) proof of closure valve can replace the two (2) STD gas valves | O   | O           |
| Customized control systems and accessories                            | O   | O           |

(A) Panel with lights, control switch and manual potentiometer is optional on JRA.

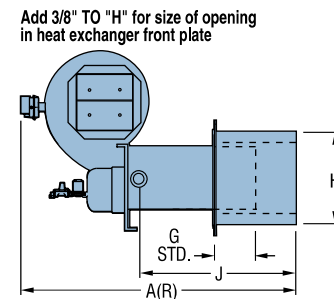
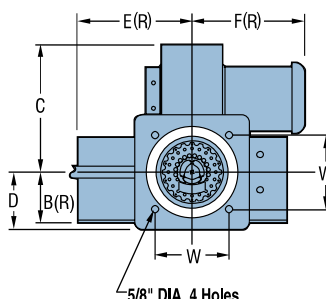
■ Conforms to UL 795.

\* 8:1 Turndown can be achieved without adiabatic chamber in some applications. Consult factory.

## MODEL JA HTD



## MODEL JRA HTD (For low centerline applications)



## DIMENSIONS (Inches) Standard Models.

## RATINGS & SPECIFICATIONS

| Burner Model | A      | A(R)   | B     | B(R)  | C      | D     | E     | E(R)   | F  | F(R)   | G Std. | G Min. | G Max. <sup>3</sup> | H      | J      | W     | Natural Gas Max. MBH <sup>1</sup> | Nominal Boiler H.P. Max. | Blower Motor H.P. (3450 RPM) | Standard Gas Train Size (in.) | Gas Pressure Required (in. W.C.) <sup>2</sup> |
|--------------|--------|--------|-------|-------|--------|-------|-------|--------|----|--------|--------|--------|---------------------|--------|--------|-------|-----------------------------------|--------------------------|------------------------------|-------------------------------|---|
| J15A-10HTD   | 31 1/2 | 28 3/4 | 3 1/2 | 5     | 12 1/2 | 5 7/8 | 8 1/4 | 11 1/4 | 14 | 10 1/4 | 4      | 3      | -                   | 9      | 16     | 7 1/4 | 700                               | 16.7                     | 1/4                          | 1                             | 4.0   |
| J30A-10HTD   | 31 1/2 | 28 3/4 | 3 1/2 | 5     | 12 1/2 | 5 7/8 | 8 1/4 | 11 1/4 | 14 | 11 3/4 | 4      | 3      | -                   | 9      | 16     | 7 1/4 | 1,075                             | 25.6                     | 1/3                          | 1                             | 7.3   |
| J30A-12HTD   | 31 1/2 | 28 3/4 | 3 1/2 | 5     | 12 1/2 | 5 7/8 | 8 1/4 | 11 1/4 | 14 | 11 3/4 | 4      | 3      | -                   | 9      | 16     | 7 1/4 | 1,260                             | 30.0                     | 1/3                          | 1 1/4                         | 7.4   |
| J50A-15HTD   | 34 1/4 | 32 1/4 | 4 3/8 | 5 1/8 | 14     | 6 1/4 | 8 1/2 | 11 1/4 | 14 | 11 3/4 | 4      | 3 3/4  | -                   | 10 3/8 | 18 1/8 | 8 1/4 | 2,200                             | 52.3                     | 1/3                          | 1 1/2                         | 9.0   |

1. PF certified capacities listed are based on +0.5" W.C. combustion chamber pressure.
2. At inlet to main manual shutoff cock to obtain P/F certified rating with standard U.L. gas train. Optional gas trains available for lower pressures.
3. Consult factory.
4. Stated turndowns are based upon maximum burner firing rate.



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