



Peerless® *PUREFIRE*®

PF-850 Features and Standard Equipment

Performance:

- Full Load Thermal Efficiency 96.2%
- Design Certified by SCAQMD for Low NOx Operation
- Dual Modulating Burners with 10:1 Overall Turndown Capability
- Factory Equipped for Outdoor Reset Operation
- Dual Temperature Settings for Central Heating and Domestic Hot Water
- Dual Flame Sensing for Reliable Ignition
- Suitable for Firing Natural or LP Gas
- Modbus Capable

Construction:

- Designed, Constructed and Stamped in accordance with ASME Boiler & Pressure Vessel Code, Section IV
- Design certified for Zero Clearance to Combustible Construction
- Space Saving Stackable Design
- Maximum Allowable Working Pressure: 160 PSI
- 304L Stainless Steel Heat Exchanger
- Heavy Gauge Support Structure & Cabinet
- Removable Jacket Panels
- Leveling Legs

Exhaust/Air Intake Piping:

- Suitable for Direct Vent Combustion Operation with Inside or Outside Air
- Stainless Steel Drain Tee w/Condensate Neutralization
- Designed for Common Venting/Air Inlet
- Vent Temperature Sensor

Safety Features:

- 30 PSIG ASME Safety Relief Valve (Loose)
- Pressure/Temperature Gauge (Loose)
- Integrated Connections for Low Water Cut Off or Flow Switch
- Manual Reset High Temperature Limit

Codes:

- Design Certified to ANSI Z21.13
- CSD-1 Compliant
- California Emissions Compliant
- Massachusetts Plumbing Code Compliant

Control Features:

- Plain English Status Display
- Factory Equipped for Multiple Boiler Cascade Operation
- Advanced Burner Control Logic for Common Venting of Multiple Boilers
- Flame Signal Logging Capability
- Freeze Protection
- DHW Tank Warm Hold
- Ramp Delay Step Modulation
- Outdoor Sensor Included
- System Type Presets
- Temperature Boost Function
- Warm Weather Shut Down
- Anti Cycling Logic
- Limited DHW Priority
- DHW Heat Economy Circulation
- Service Notification
- System Test for Manual Control of Firing Rate
- Fault History
- Alarm Contacts
- Analog Input for Set Point Control
- Modbus Communications Capability

Combustion System:

- State of the Art Metal Mesh Burner
- Dual Flame Sensing
- High Energy Spark Ignition

Condensate System:

- Built-in Condensate Trap with Neutralization
- Blocked Condensate Switch
- Highly Visible, Easy Access Condensate Collector

Warranty:

- One Year Parts Warranty
- One Year Labor Program*
- 10 Year Limited Heat Exchanger Warranty
- Available 5 and 10 Year Extended Plans

*Purchased by PB Heat, LLC, if product and installer/service provider are registered with program administrator.

PEERLESS® PUREFIRE® HIGH EFFICIENCY STAINLESS STEEL BOILER

SERIES PEERLESS® PUREFIRE® BOILER RATINGS

Boiler	Input (MBH)		Heating Capacity (MBH)	Net Ratings (MBH)	Thermal Efficiency (%)
	Min	Max			
PF-850	85	850	818	711	96.2

SERIES PEERLESS® PUREFIRE® CAPACITIES

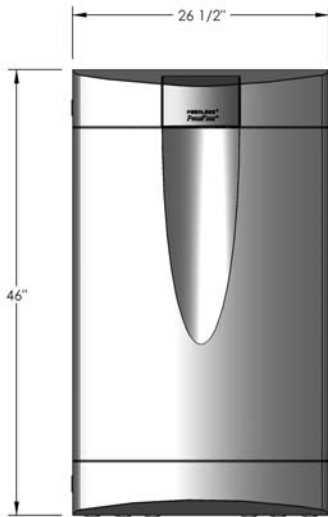
Gas Pressure Min/Max (Inch WC)		Total Water Capacity (Gallons)	Water Flow Rate & Pressure Drop			Total Combined Length of Air Intake & Vent (Feet)	Shipping Weight (Lbs)
			Design Temp Differential (°F)	Flow Rate (GPM)	Pressure Drop (Feet)		
4.5	27.0	4.07	20	81.8	24.94	200	345
			30	54.5	11.83		
			40	39.5	6.57		

SERIES PEERLESS® PUREFIRE® ELECTRICAL RATINGS

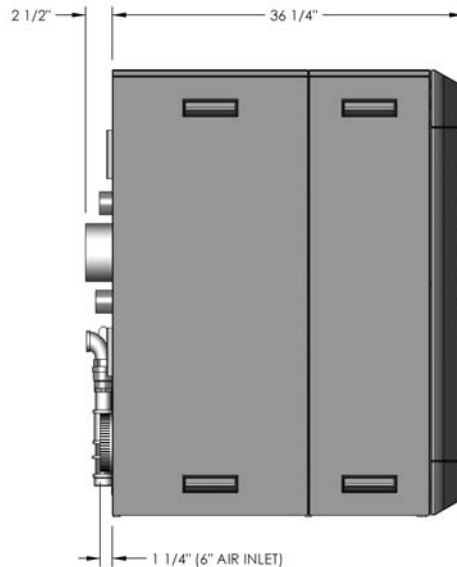
Supply Voltage	Frequency (±10 hz)	Blower Current (Amps)	Gas Valve Current (Amps)	Total Control Circuit Current (Amps)	Circulating Pumps Maximum Current (Amps)	Total Pump Circuit Maximum Current (Amps)
120 VAC	60 hz	2.50 x 2	0.21 x 2	5.42	10.00 x 2	20.00

Optional Equipment:

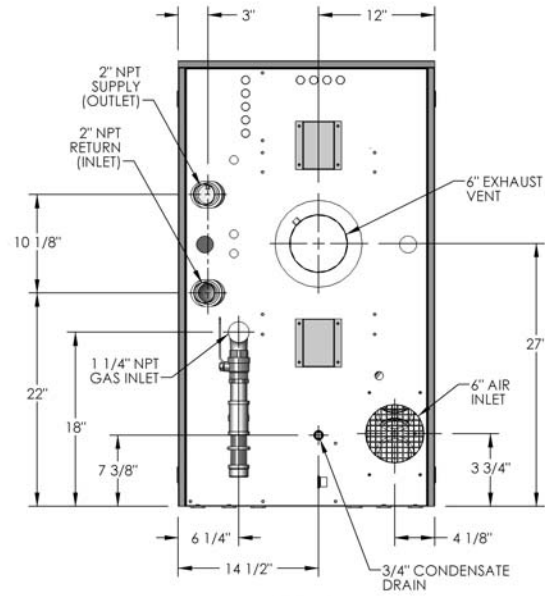
- Domestic Water Tank Temperature Sensor
- System Sensor for Multiple Boilers
- 50 PSI Safety Relief Valve
- 100 PSI Safety Relief Valve
- 150 PSI Safety Relief Valve
- BACnet or LonWorks Gateway



FRONT VIEW



LEFT SIDE VIEW



REAR VIEW

