

# 830 ES Gas Tankless Water Heater

## Engineering Submittal Sheet

### 830 ES Performance Data

Maximum Gas Input (BTU)	175,000
Minimum Input (BTU)	19,900
Maximum Output (BTU)	147,000
Minimum Output (BTU)	18,300
Thermal Efficiency	82%

### 830 ES Operational Data

Weight (lbs.)	67
Min. Inlet Gas Pressure NG("WC) / LP("WC)	3.5 / 8
Max. Inlet Gas Pressure NG("WC) / LP("WC)	10.5 / 13
Maximum Output Temperature (°F)	140°F
Flow Rate at 35°F ΔT (GPM)	8.3
Flow Rate at 45°F ΔT (GPM)	6.4
Max. Working Pressure (psi)	150
Min. Working Pressure (psi)	30
Min. Activation Flow (GPM)	0.5
Relief Valve Pressure Rating (psi)	150
Venting Category	III

### 830 ES Approved Venting Material

Item	Diameter	Material
Exhaust Vent	3 or 4 inches	Sealed single wall stainless steel (AL29-4C)
Intake Vent	3 or 4 inches	Sealed PVC or any other rigid pipe

### 830 ES Electrical Specifications

Electrical Voltage Mains	120V/60Hz
Power Consumption Max Load (A)	≤ 2.5
Idle (mA)	40

### 830 ES Clearances

	Minimum Clearance to Combustibles (Inch)
Front	1
Rear	0
Side	1
Floor	12
Top	12

### Additional Information

- Low NOx emissions
- Modulating water valve to improve temperature stability
- Modulating premix burner with constant gas/air ratio
- Direct-vent sealed combustion
- Direct spark ignition
- 150 psi relief valve included
- Concentric termination available
- LCD display with backlight / control buttons
- 100% copper heat exchanger

### Options

- Wireless remote control (TSTAT2)
- Cascading kit (77090003962)
- Outdoor kit (BTOK)
- External water filter (8703305356)
- Concentric termination kit (ESHCK)
- Exhaust/Intake bird screen (L2594)
- Gas conversion kit (8 719002176)
- Pipe Cover (PTPCES)
- High temperature kit (7736500074)
- Recess box kit (7736500043)
- Pressure relief valve (FWL-2).

Note: Refer to installation and applications manual for specific information on venting, piping, electrical connections, and pump sizing.

**830 ES Piping Specifications**

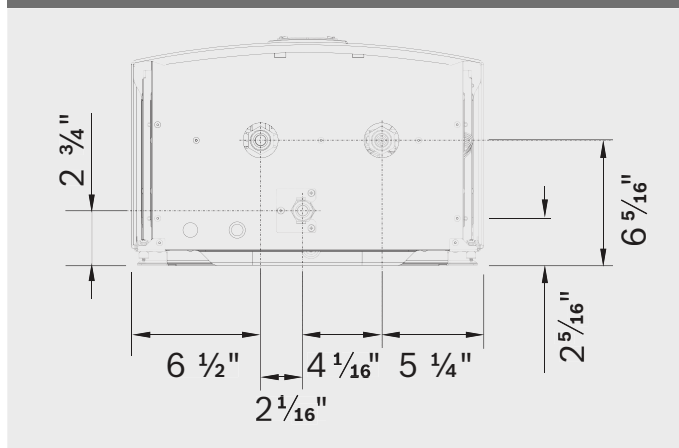
Exhaust Pipe Diameter	3" or 4"
Combustion Air Pipe Diameter	3" or 4"
Gas Connection Size	¾" NPT
Water Connections	¾" NPT

**Note:** Exhaust and combustion air connection adaptors are 3" diameter.

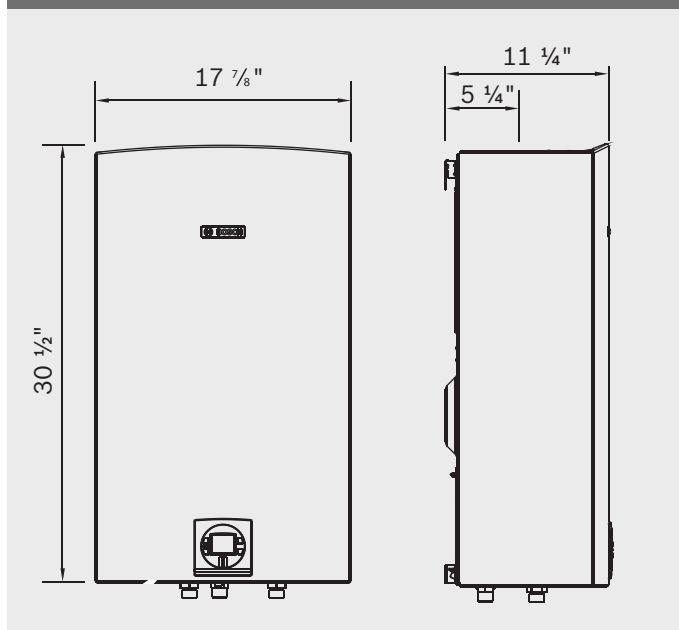
**830 ES Venting Specifications**

	Diameter	Approved Terminals
EXHAUST	3" or 4"	"T" terminal
		90° elbow
		3" horizontal terminal
		3" vertical raincap
		Concentric Vent/Air intake with termination tee
INTAKE	3" or 4"	"T" terminal
		90° elbow
		3" horizontal terminal
		3" vertical raincap
		Concentric Vent/Air intake with termination tee

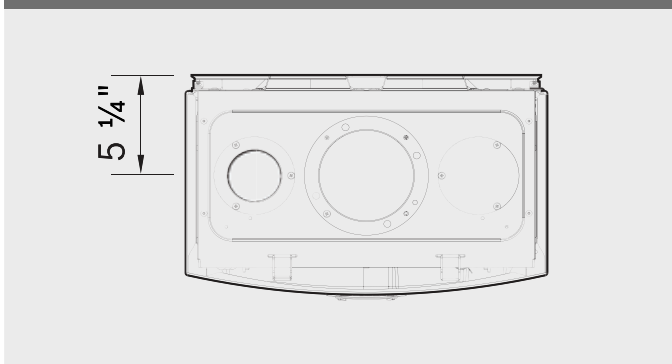
**830 ES Bottom View**



**830 ES Front / Side View**



**830 ES Top View**



Note: Intake can be installed on the left or right side of the exhaust.



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