

# PVG™ & SCG™

High Efficiency Direct Vent &  
Sealed Combustion Cast Iron Water Boilers

**85%**

HIGH EFFICIENCY



GAS BOILERS



**The Ultimate Combination  
of Efficiency and Value!**

- 85+% AFUE (5 sizes)  
ENERGY STAR® Certified
- 70 to 280 MBH in 7 Sizes
- Rugged Cast Iron Sectional Design
- Natural or LP Gas
- PVG - Power Vented  
SCG - Sealed Combustion Venting
- Limited Lifetime Warranty



**Limited  
Lifetime  
Warranty!**

**Burnham®**  
by  
**U.S. Boiler Company**

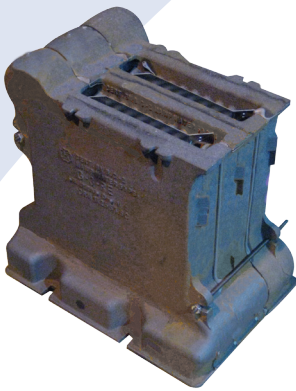
# PVG & SCG

## High Efficiency Direct Vent and Sealed Combustion Cast Iron Water Boilers

### Unbeatable Efficiency & Value!

Burnham PVG & SCG boilers offer a unique combination of high efficiency and value to homeowners. Available in direct vent (PVG) or sealed combustion (SCG) both models utilize either 3 or 4-inch stainless steel vent pipe to direct the flue products out of the building. This eliminates the need to install a liner in an existing chimney – which is often a major expense when replacing an older boiler.

PVG and SCG series boilers are simple to install, and require very little service and maintenance – especially compared to higher-efficiency condensing boilers. This can save homeowners hundreds of dollars in up-front installation costs, as well as several hundred dollars a year in maintenance and tune-up's. Factoring in installation, annual service, and fuel usage - over time the operating costs of the SCG and PVG may be well below those of condensing boilers. While low temperature radiant heat systems are becoming more popular in newer buildings, many still utilize baseboard heat, convectors, air handlers, & indirect water heaters - which generally require higher water temperatures. Cast iron boilers are the best choice for these applications. The PVG and SCG deliver the winning combination of efficiency and durability in high-temp heating applications.



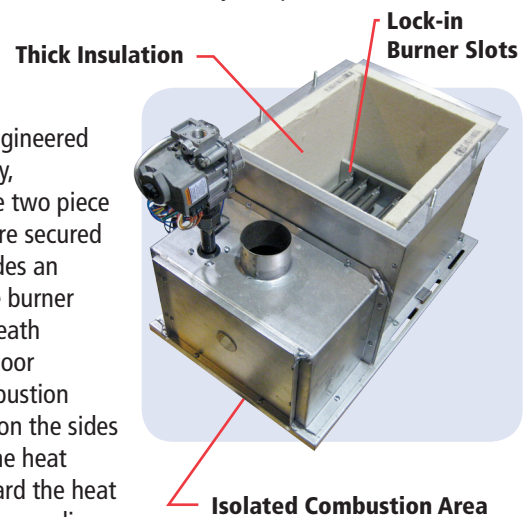
### Reliable Cast Iron Heat Exchanger

PVG & SCG boilers have rugged cast iron heat exchanger sections that are poured at Burnham Foundry, LLC, a state-of-the-art foundry in Zanesville, Ohio. The heat exchanger itself is designed for efficiency. Round pins on the outside of the exchanger increase the surface area which increases heat transfer. Inside, dimpled waterways promote turbulence as water flows through the castings. This helps to thoroughly mix cooler return water with the water inside the heat exchanger. As a result, PVG and SCG boilers are more resistant to thermal shock and condensation than other comparable boilers. Steel nipples are used to join sections together. This vital component is impervious to petroleum-based chemicals (like antifreeze) which can break down the rubber gaskets that are used by competitors.



### A Better Burner Base

The burner base in the PVG & SCG has been engineered to deliver on our ongoing commitment to safety, reliability, and durability. Underneath it's simple two piece design sits stainless steel burner tubes which are secured by lock-in burner slots. A 1/4" pilot tube provides an ample flow of gas which contributes to reliable burner performance. An isolated combustion area beneath the burner tubes optimizes airflow and keeps floor temperatures low beneath the boiler. The combustion chamber itself is lined with thick 1" insulation on the sides and 1-1/2" insulation on the rear. This keeps the heat generated in combustion directed upward toward the heat exchanger, not out into the boiler jacket and surrounding area.



### Safety Without Compromise

U.S. Boiler Company's reputation for building safe products is an ongoing commitment that is taken very seriously. Many additional safety features have been built into the PVG & SCG.

- **Blocked Vent Switch**  
Safely shuts the boiler down if a chimney or vent blockage is detected.
- **Flame roll-out switch**  
If an internal flueway restriction is detected, this device will automatically stop the flow of gas to prevent combustion gases from seeping into the home.
- **Concealed Controls**  
All boiler controls are safely hidden under the jacket to prevent damage & tampering.



## PVG & SCG Boilers

### Reliable Controls

High quality, reliable controls are safely concealed inside the boiler jacket.

### "Plug & Play"

#### Component Installation

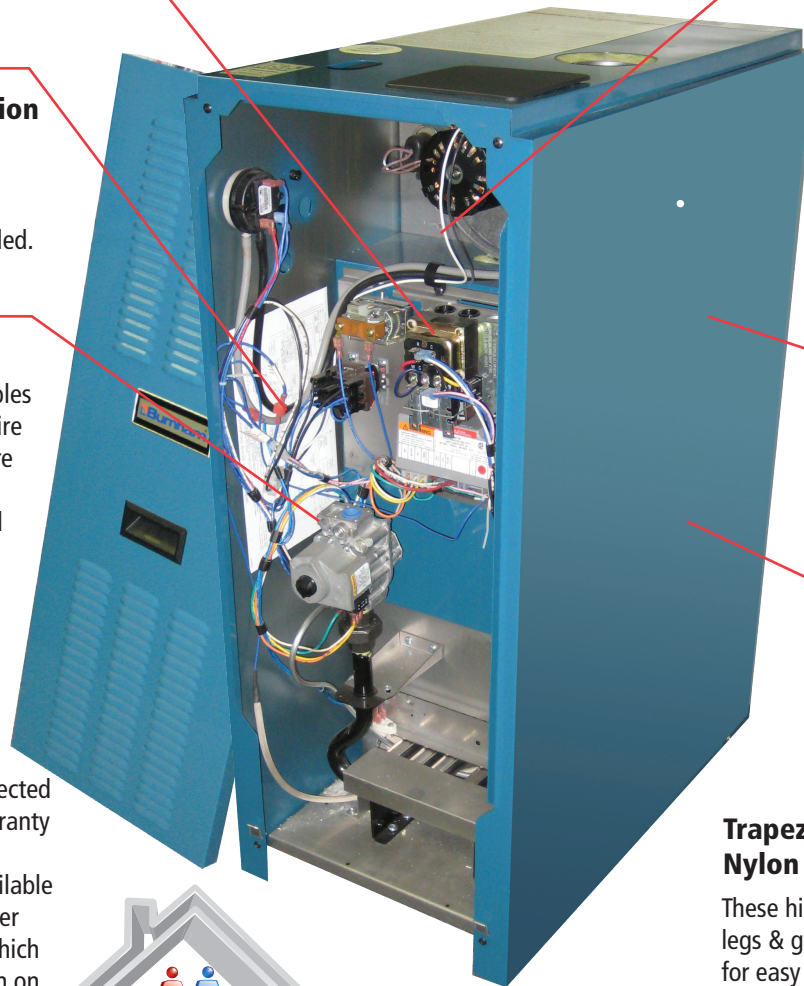
Plug-in wiring harnesses for installation of LWCO and auxiliary high limit are accessible and clearly labeled.

### Step Opening Gas Valve

This type of gas valve enables the boiler to start on low fire and continue on to high fire safely and smoothly. This provides quiet ignition and promotes long boiler life.

### Limited Lifetime Warranty

The PVG and SCG are protected with a limited lifetime warranty on the heat exchanger. Additional coverage is available by purchasing the U.S. Boiler Extended Warranty Plan which provides blanket protection on parts and labor for 5 or 10 years from the date of installation.



### Contractor-Friendly Design

High mounted control panel, easy access to fan, simple field conversion kit available for LP applications.

### 1" Insulation

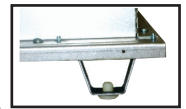
Surrounds boiler block which reduces heat loss through the boiler jacket.

### Rugged Jacket

Tough powder coated steel jacket designed for durability.

### Trapezoidal Legs with Nylon Glides

These high strength legs & glides allow for easy positioning of the boiler, and protect against potential damage to flooring.



GAS BOILERS

## Burnham Alliance SL™ Indirect-fired Water Heaters



For an abundant supply of domestic hot water, be sure to use an Burnham Alliance SL indirect-fired water heater with every boiler application.


The Alliance SL water heaters are designed with an effective hydrastone lining that offers superior corrosion resistance and outstanding performance in a wide variety of water conditions.

Water heaters are available in five sizes and come with a unique 10/2/1 warranty – 10 years on the tank and coil, 2 years labor and 1 year on parts. An optional lifetime warranty is also available.



# Ratings

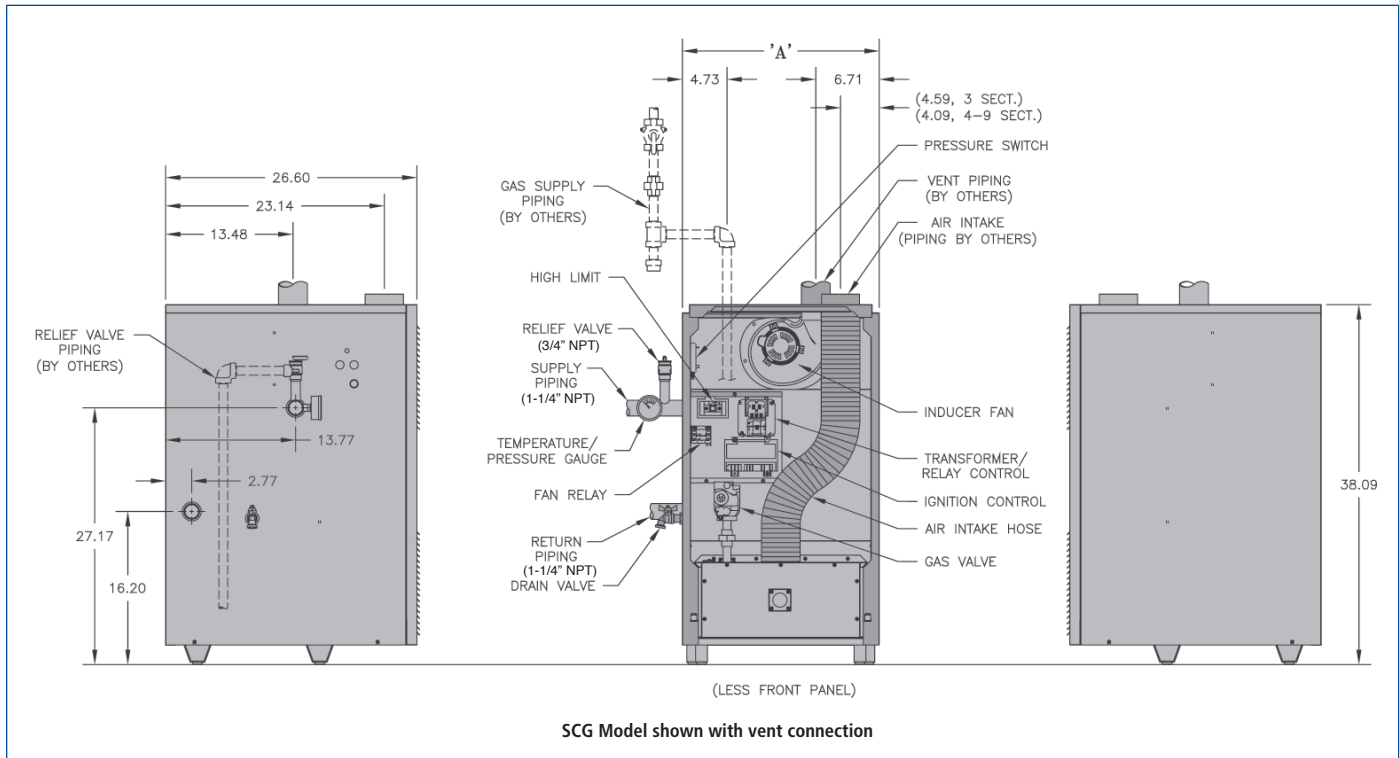


Model Number	Input	DOE Heating Capacity (MBH)	I=B=R Water Ratings	 AFUE%
SCG3 / PVG3	70	60	52	85.5
SCG4 / PVG4	105	90	78	85.4
SCG5 / PVG5	140	120	104	85.3
SCG6 / PVG6	175	150	130	85.2
SCG7 / PVG7	210	179	156	85.0
SCG8 / PVG8	245	208	181	84.5*
SCG9 / PVG9	280	238	207	84.0*

\*Only SCG3/PVG3 through SCG7/PVG7 are ENERGY STAR certified at 85+% AFUE

# Specifications

Model Number	Dimensions (inches)			Connections (inches)		Water Content (gal.)	Approximate Shipping Weight (lbs.)
	'A'	'B'	'C'	Vent	Air Intake		
SCG3 / PVG3	11.65	26.60	38.09	3	3	2.16	210
SCG4 / PVG4	14.72	26.60	38.09	3	3	3.00	254
SCG5 / PVG5	17.78	26.60	38.09	3	4	3.84	298
SCG6 / PVG6	20.84	26.60	38.09	3	4	4.68	342
SCG7 / PVG7	23.90	26.60	38.09	3	5	5.52	386
SCG8 / PVG8	26.97	26.60	38.09	4	5	6.36	430
SCG9 / PVG9	30.03	26.60	38.09	4	5	7.20	474



**U.S. Boiler Company**  
[www.usboiler.burnham.com](http://www.usboiler.burnham.com)

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