



Residential Gas Water Heaters

VERTEX™ 90% THERMAL EFFICIENCY CONTINUOUS HOT WATER VERSATILE POWER VENT DESIGN

Today's homes demand more hot water than ever before, and the 90% efficient Vertex power vent gas water heater offers unprecedented levels of performance to meet the need. The 50-gallon Vertex delivers more hot water than a standard 75-gallon atmospheric gas water heater. In fact, the fully condensing Vertex design is so advanced, it can deliver "continuous hot water for shower after shower"...a constant flow of over 3 gallons per minute.* Yet Vertex is easy to install, with height, diameter and installation requirements similar to standard power vent units.

HELICAL INTERNAL HEAT EXCHANGER

- Spiral heat exchanger keeps hot combustion gases in the tank longer to lengthen the heat transfer cycle
- Positioned in the center of the tank for more even heat distribution
- Operates at 90% thermal efficiency, which saves money on operating costs compared to a standard 78% efficient gas water heater

POWER VENTS USING PVC PIPE

- Combined vertical and horizontal runs terminating through an outside wall. Installations require ULC s636 approved PVC or CPVC pipe for venting.
 - 2" pipe, vents up to 45 equivalent feet
 - 3" pipe, vents up to 128 equivalent feet

MODULAR BLOWER

- Equipped with 120 volt, 60 Hz electrical system (rating 5 amps or less), 6-foot cord with standard 3-prong connector
- 2" PVC pipe, elbows and condensate drain supplied to connect heat exchanger outlet to blower
- PVC Vent Attenuation Assembly (VAA) supplied

SIDE-MOUNTED HOT AND COLD RECIRCULATING TAPS

- Allows Vertex to be installed as part of combination space heating/water heating applications or any system requiring a recirculating hot water loop, including radiant floor heating

INTELLI-VENT™ GAS CONTROL**

- Equipped with nearly indestructible silicon nitride hot surface ignitor - no standing pilot
- Advanced electronics for more precise control of water temperature and easy to understand system diagnostics

COMMERCIAL GRADE GLASS LINING

- A. O. Smith PermaGlas® Ultra Coat™ process provides superior protection against corrosion
- Protects all interior tank surfaces including inside and outside of helical heat exchanger

TWO HEAVY-DUTY ANODE RODS

- Provide maximum protection against corrosion

CSA CERTIFIED AND ASME RATED T&P RELIEF VALVE

MAXIMUM HYDROSTATIC WORKING PRESSURE: 150 PSI

* 3.07 GPM continuous flow, based on 65°F inlet water temperature, 110°F outlet temperature.

**Intelli-Vent™ is a registered trademark of Emerson Electric Company

GPHE-50



SERIES 100





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CODES AND STANDARDS

- Design-certified by UL (Underwriters Laboratories) according to ANSI Z21.10.3 - 4.3 CSA Standards
- Meets the thermal efficiency and standby loss requirements of the current edition ASHRAE/IESNA 90.1.

6-YEAR LIMITED TANK AND PARTS WARRANTY

For complete information, consult written warranty or A. O. Smith Water Products Company.

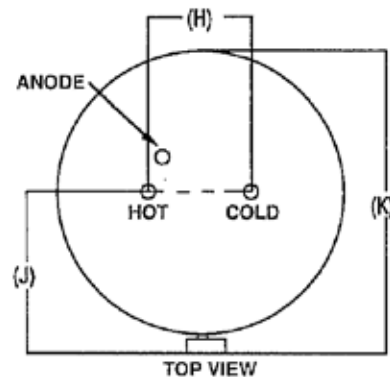
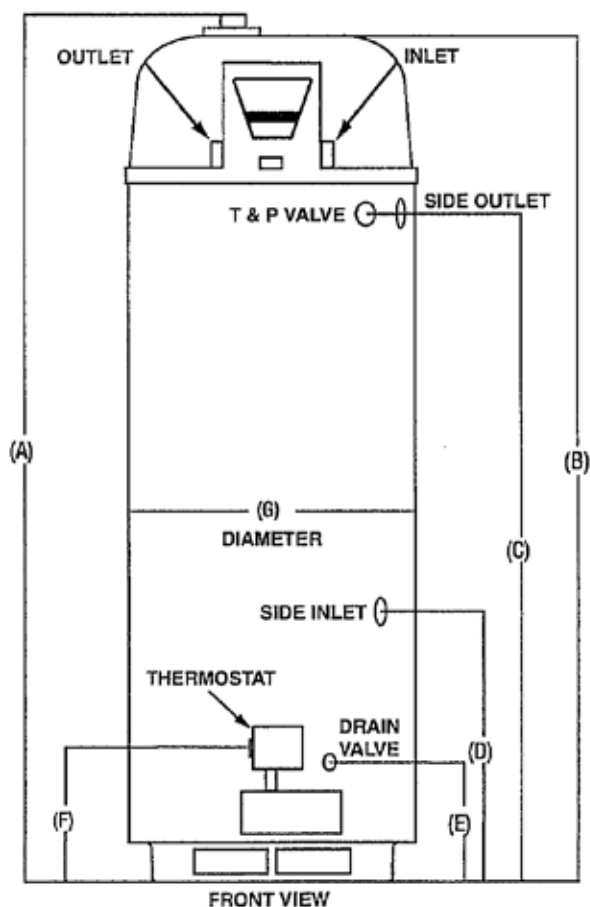
CAPACITY & DIMENSIONS

MODEL	BTU INPUT PER HOUR	GALLON CAPACITY	FIRST HOUR DELIVERY GALLONS	RECOVERY 90°F RISE GALLONS PER HOUR	DIMENSIONS IN INCHES										SHIPPING WEIGHT LBS
					A	B	C	D	E	F	G	H	J	K	
GPHE 50*	76,000	50	127	92	70-5/8	68-1/4	52	21	9-1/8	12	22	8	15-3/4	27	210

*Natural gas only

Inlet and outlet connections: 3/4" male

Circulation loop connections: 3/4" female



* INSTALL IN ACCORDANCE WITH LOCAL CODES

For Technical Information, call 1-888-479-8324. A. O. Smith reserves the right to make product changes or improvements without prior notice.