



90% THERMAL EFFICIENCY
ENDLESS HOT WATER
VERSATILE POWER-VENT DESIGN

GPHE-50

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 hot water output that rivals a 75-gallon atmospheric gas water heater. In fact, the fully condensing Vertex design is so advanced, it can deliver "endless hot water for showers"...a continuous 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

- Completely surrounded by water in tank, provides much greater heat transfer surface than standard straight flue tube
- Helps produce 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 vent runs terminating through an outside wall, using Schedule 40 PVC pipe
 - 2" pipe, vents up to 25 equivalent feet
 - 3" pipe, vents up to 65 equivalent feet
 - 4" 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 even more protection against corrosion

GREEN CHOICE® GAS BURNER

- Patented "eco-friendly" design reduces NOx emissions by up to 33% and complies with Southern California and Texas requirements

FACTORY-INSTALLED TEMPERATURE AND PRESSURE RELIEF VALVE

MAXIMUM HYDROSTATIC WORKING PRESSURE: 150 PSI

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



A.O. Smith
Water Heaters

VERTEX™ 90% THERMAL EFFICIENCY POWER-VENT

CODES AND STANDARDS

- Design-certified by UL (Underwriters Laboratories) according to ANS Z21.10.3
- Meets or exceeds ASHRAE/IESNA 90.1-1999 and 2004 NAECA

SIX-YEAR LIMITED TANK AND PARTS WARRANTY

- For complete warranty details, consult written warranty shipped with heater or contact A. O. Smith

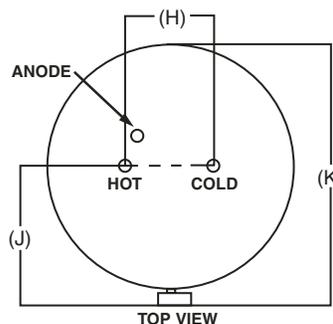
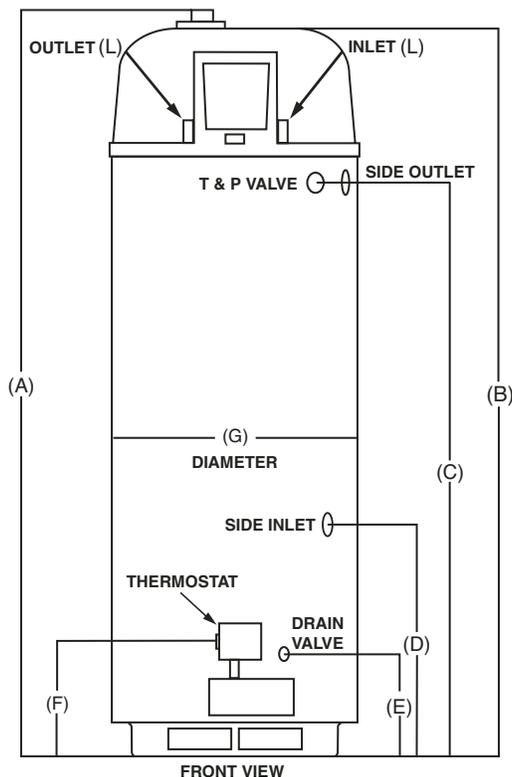
MODEL NUMBER	BTU INPUT PER HOUR	GALLON CAPACITY	FIRST HOUR DELIVERY GALLONS	RECOVERY 90°F RISE GALLONS PER HOUR	SHIPPING WEIGHT LBS
GPHE-50	76,000	50	127	92	210

* Natural gas only

DIMENSIONS IN INCHES

MODEL	A	B	C	D	E	F	G	H	J	K
GPHE-50	70-5/8	68-1/4	52	21	9-1/8	12	22	8	15-3/4	27

Inlet and outlet connections: 3/4" male
Circulation loop connections: 3/4" female



* INSTALL IN ACCORDANCE WITH LOCAL CODES

A.O. Smith

Water Heaters

www.hotwater.com

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For Technical Information and Automated Fax Service, call 800-527-1953.
A. O. Smith reserves the right to make product changes or improvements without prior notice.