

VERTEX® 94% THERMAL EFFICIENCY VERSATILE POWER VENT DESIGN

Today's homes demand more hot water than ever before, and the 94% 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 delivers hot water shower after shower...at 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.

ENERGY STAR® QUALIFIED

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 94% thermal efficiency, which saves money on operating costs compared to a standard 78% efficient gas water heater

POWER VENT DESIGN

- Combined vertical and horizontal runs terminating through an outside wall using ULC S636 PVC, CPVC, or polypropylene 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

BLUE DIAMOND® GLASS COATING 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

CODE COMPLIANCE

- Meets the thermal efficiency and standby loss requirements of NRCan and current edition of ASHRAE/IESNA 90.1

DESIGN-CERTIFIED BY UNDERWRITERS LABORATORIES

- Certified at 300 PSI test pressure and 150 PSI working pressure. Listed according to ANSI Z21.10.1 - CSA 4.1 standards governing storage tank-type water heaters

WARRANTY

- 6 year limited tank warranty
 - 6 year limited parts warranty
- For complete information, consult written warranty or A. O. Smith

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

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



PERFORMANCE

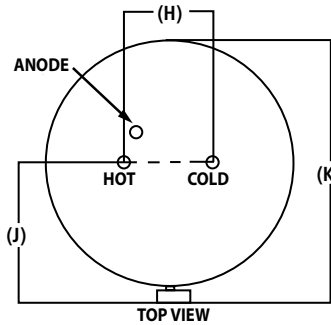
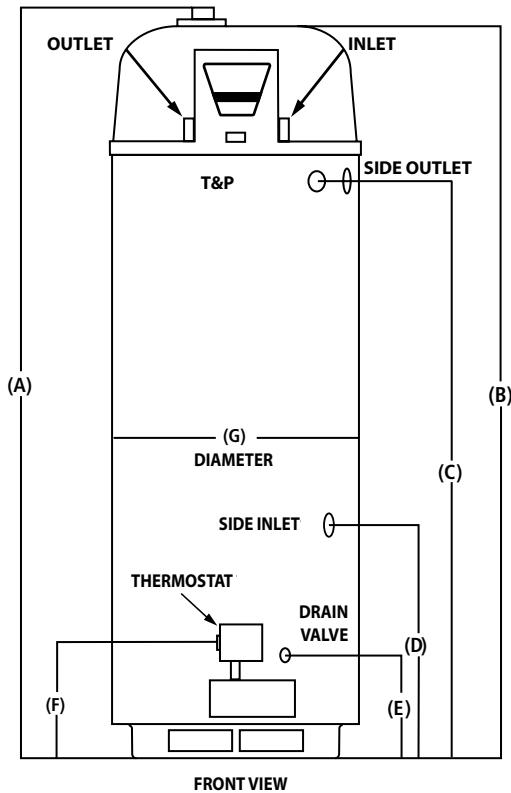
MODEL	SERIES	CAPACITY		MAXIMUM CERTIFIED ALTITUDE FT (M)	INPUT BTU/h	RECOVERY RATE AT 90°F TEMPERATURE RISE	THERMAL EFFICIENCY	UEF	BC COMPLIANT
		USG	L			GPH (LPH)			
NATURAL GAS									
GPHE-50	130	50	189	5,300 (1,615)	76,000	96 (364)	94%	0.88	√

Available in natural gas only.

DIMENSIONS & SHIPPING WEIGHT

MODEL	INSTALLATION HEIGHT	HEIGHT TO TOP OF TANK	HEIGHT TO T&P	HEIGHT TO UPPER SIDE CONNECTION	HEIGHT TO LOWER SIDE CONNECTION	HEIGHT TO DRAIN VALVE	HEIGHT TO THERMOSTAT	TANK DIAMETER	HOT CONNECTION TO COLD CONNECTION	WATER CONNECTION DEPTH FROM FRONT OF TANK	OVERALL DEPTH	TOP WATER CONNECTIONS	SIDE WATER CONNECTIONS	SHIPPING WEIGHT
	A IN (CM)	B IN (CM)	C IN (CM)	C IN (CM)	D IN (CM)	E IN (CM)	F IN (CM)	G IN (CM)	H IN (CM)	J IN (CM)	K IN (CM)	IN NPT	IN NPT	LB (KG)
NATURAL GAS														
GPHE-50*	71 (180)	68 5/8 (174)	52 (132)	52 (132)	21 (53)	9 1/8 (23)	12 (30)	22 (56)	8 (20)	15 3/4 (40)	27 (69)	3/4	3/4	225 (102)

*Model has side connections.



Install in accordance with local codes

For Technical Information call 888-599-2837. A. O. Smith Enterprises Ltd. reserves the right to make product changes or improvements without prior notice.