

BOCK *OPTiTHERM*™

Modulating Condensing Natural Gas Water Heater

*"Fuel Saving" **optiTHERM** fulfills varying hot-water heating loads at lowest energy inputs!
Tests confirm potential 15% fuel savings over "on/off" high-efficiency water heaters!*

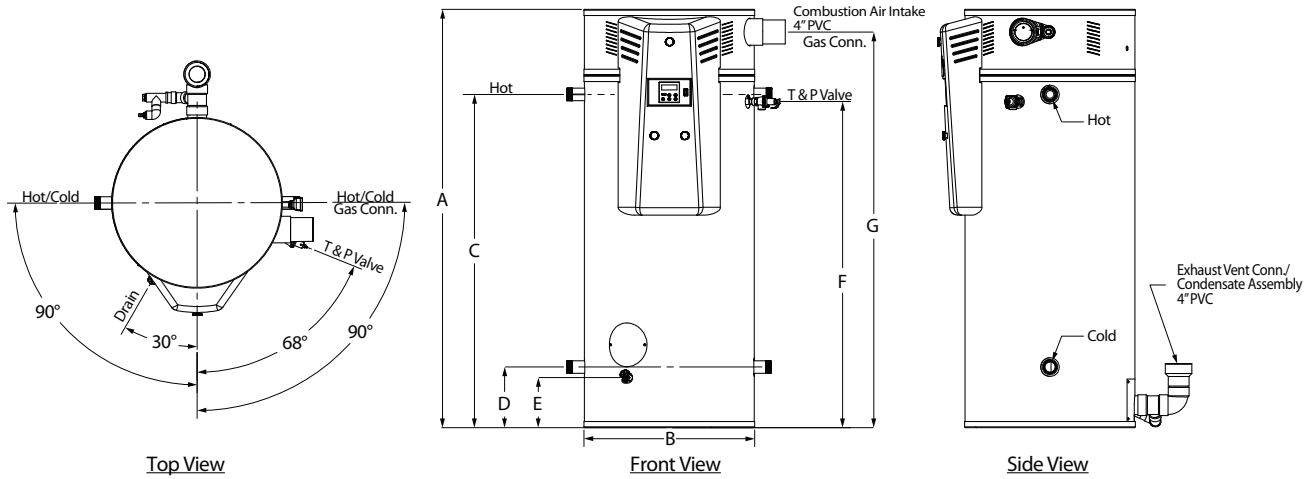
optiTHERM features:

- ◆ Modulating Pre-Mix Blue Flame Burner
- ◆ 500,000 to 135,000 BTU Modulation Range
- ◆ Dual **Turboflue**® Helical-Fin 3-Stage Heat Exchanger
- ◆ Up to 97% Thermal Efficiency
- ◆ Automated Cathodic Corrosion Protection System
△ **NO SACRIFICIAL ANODE RODS**
- ◆ Five-Year Tank/Heat Exchanger Warranty
- ◆ Ultra Low NOx Operation (20 ppm / 14 ng/J)
- ◆ Submerged Combustion Chamber
- ◆ LCD User Interface with Optional BMS Interface
- ◆ PVC or CPVC Power-Vent or Power-Direct-Vent
- ◆ Glass-Fused-to-Steel Water Vessel/Heat Exchanger
- ◆ Low-Fire Ignition for Smooth, Easy Light Offs
- ◆ Stealth Quiet™ Operation



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Dimensions and Connections

Model	Dimensions in Inches (cm)							Cold NPT	Hot NPT	Gas NPT	Air Intake PVC	Exhaust Vent PVC	Shipping Weight LBS(kg)
	A	B	C	D	E	F	G						
OT300N-A	78.50 (199)	32.00 (81)	62.78 (159)	11.43 (29)	9.43 (24)	61.43 (156)	74.00 (188)	2"	2"	1-1/2"	4"	4"	1,200 (544)
OT400N-A	78.50 (199)	32.00 (81)	62.78 (159)	11.43 (29)	9.43 (24)	61.43 (156)	74.00 (188)	2"	2"	1-1/2"	4"	4"	1,200 (544)
OT500N-A	78.50 (199)	32.00 (81)	62.78 (159)	11.43 (29)	9.43 (24)	61.43 (156)	74.00 (188)	2"	2"	1-1/2"	4"	4"	1,200 (544)

Storage, Inputs, Recovery and Efficiency

Model	Storage GAL (L)	Max. Rated Input BTU/HR (KW)	Min. Rated Input BTU/HR (KW)	Recovery @ 100°F Rise GAL/HR (L/HR)	1st Hr. Del. @ 100°F Rise GAL (L)	Thermal Efficiency @ Max Input (%)	Thermal Efficiency @ Min Input (%)
OT300N-A	125 (473)	300,000 (87.9)	135,000 (39.6)	342 (1,295)	460 (1,741)	95	97
OT400N-A	125 (473)	400,000 (117.2)	135,000 (39.6)	451 (1,707)	568 (2,150)	94	97
OT500N-A	125 (473)	500,000 (146.5)	135,000 (39.6)	558 (2,112)	674 (2,551)	93	97

Minimum and Maximum Vent Lengths - 4" / 6" Pipe

Model	Pipe Arrangement	Minimum Equivalent Pipe Length (per pipe run)		Maximum Equivalent Pipe Length (per pipe run)	
		Air Intake (ft)	Vent (ft)	Air Intake (ft)	Vent (ft)
All Models	Power Direct Vent (2 Pipe)	20 / 50	20 / 50	50 / 120	50 / 120
	Power Vent (1 Pipe)	0 / 0	20 / 50	0 / 0	100 / 240

T&P valve and brass drain valve factory installed.

Standard Voltage (all): 120V, 60 Hz, 1P

Maximum Working Pressure: 150 psi (1034 kPa)

All Bock products meet or exceed current ASHRAE standards.

Warning: Installation should be in accordance with all national and/or local codes. In the absence of local codes, refer to NFPA 54 or ANSI Z21.10.3.

Caution: The recommended maximum hot water temperature setting for normal residential use is 120°F. Bock recommends a tempering valve or anti-scald valve be installed and used according to the manufacturer's directions to prevent scalding.