LT SERIES



Wall-Mounted Modulating, Condensing, Tankless Water Heater With Recirculation Pump

LT150NRX1 and LT150PRX1

LT199NRX1 and LT199PRX1

LAARS Heating Systems Company

Date:

Project #:

Engineer:

Prepared By:

Bid Date:

Submittal Data

Project Name:

Location:

Contractor:

Standard Features

- Wall-mounted design with wall bracket included
- Indoor or outdoor (with opt. kit)
- Equipped with built-in recirc pump
- Return water flow sensor
- 0.98 Uniform Energy Factor (150)
  0.96 Uniform Energy Factor (199)
- 10:1 turndown (150)
  15:1 turndown (199)
- 185°F max water temperature allows commercial use (199 only)
- Cascade up to 2 LT199 recirc heaters or mix with up to 14 additional standard heaters
- Cascade up to 2 LT150 units
- ENERGY STAR® qualified
- AHRI certified
- Low lead compliant with NSF/ANSI 372
- Ultra Low NOx System - Complies with SCAQMD Rule 1146.2 for natural gas low NOx emissions of 4ng/J or 20 ppm
- Designed in accordance with H.U.D. and approved for manufactured and mobile home installation (when built 2024 or later)
- Natural or propane (field convertible with kit)
- Sealed combustion chamber
- Pre-mix metal fiber burner
- Vent with PVC, CPVC, stainless steel or polypropylene
- Horizontal or vertical direct vent
- Common vent up to 8 units (199 only)
- Vent and air pipe lengths of up to 150 equivalent feet (each)
- Two 2" vent screens included
- Bottom water connections
- 304 stainless steel primary and secondary heat exchangers
- Direct electronic ignition with automatic flame sense
- Built-in condensate trap and drain
- Inlet air filter
- Inlet water filter
- Overheat cutoff switch
- Water leakage detector
- Exhaust temperature sensor
- Water temperature sensor
- Spare gasket kit included

Tankless Water Heater Data

Number of Units

Heater Type

- ☐ Natural Gas LT150NRX1
- ☐ Natural Gas LT199NRX1
- ☐ Propane LT150PRX1
- ☐ Propane LT199PRX1

Accessories for Field Mounting

- ☐ Condensate Neutralizer
- ☐ Cascade Rack System
- ☐ Polypropylene Common Vent System (199 only)
- ☐ Cascade Cable (one per heater)
- ☐ Piping Manifold System
- ☐ Non-Return Valve for PVC/CPVC Common Vent System (199 only)
- ☐ 3" Vent / Air Pipe Screen

ENERGY STAR

Intertek

AHRI CERTIFIED www.ahridirectory.org

Heater Data

Model	Gas Type	Max Input		Min Input		Turndown Ratio	AHRI Certified Uniform Energy Factor	Product Weight		Shipping Weight	
		BTU/hr.	*kw*	BTU/hr.	*kw*			lbs	*kg*	lbs	*kg*
LT150NRX1	Natural	150,000	*44.0*	15,000	*4.4*	10:1	0.98	70	*32*	79	*36*
LT150PRX1	Propane	150,000	*44.0*	15,000	*4.4*	10:1	0.98	70	*32*	79	*36*
LT199NRX1	Natural	199,000	*58.3*	13,000	*3.8*	15:1	0.96	85	*39*	96	*44*
LT199PRX1	Propane	199,000	*58.3*	13,000	*3.8*	15:1	0.96	85	*39*	96	*44*

Domestic Hot Water

	Capacity							
	Temp Rise		Temp Rise		Temp Rise			
	35°F	*19°C*	45°F	*25°C*	67°F	*36°C*	Minimum Water Flow	
Model	GPM	*LPM*	GPM	*LPM*	GPM	*LPM*	GPM	*LPM*
LT150	8.5	*32.1*	6.6	*24.9*	4.4	*16.6*	0.5	*1.9*
LT199	11.1	*42*	8.7	*32.9*	5.8	*22*	0.5	*1.9*

Clearances

	For Installation From Non-Combustible and Combustible Surfaces		Suggested Service Clearances	
	inches	*cm*	inches	*cm*
Top	10	*25*	18	*46*
Back	1	*2.5*	1	*2.5*
Front	4	*10*	40	*101*
Side	4	*10*	8	*20*
Bottom	10	*25*	24	*61*

Electrical Data

Power Supply		Power Consumption		
Main Supply	Maximum Current	Standby	Operation	Anti-Freeze
120V 60Hz	Less than 2A	2.7W	185W	117W

Venting System

2" Combustion Air / Vent Pipe			3" Combustion Air / Vent Pipe		
Maximum Equivalent Length*		Max Number of Elbows	Maximum Equivalent Length*		Max Number of Elbows
ft	m	5	ft	m	8
60	18		150	*45*	

*For each elbow, reduce maximum allowable length:

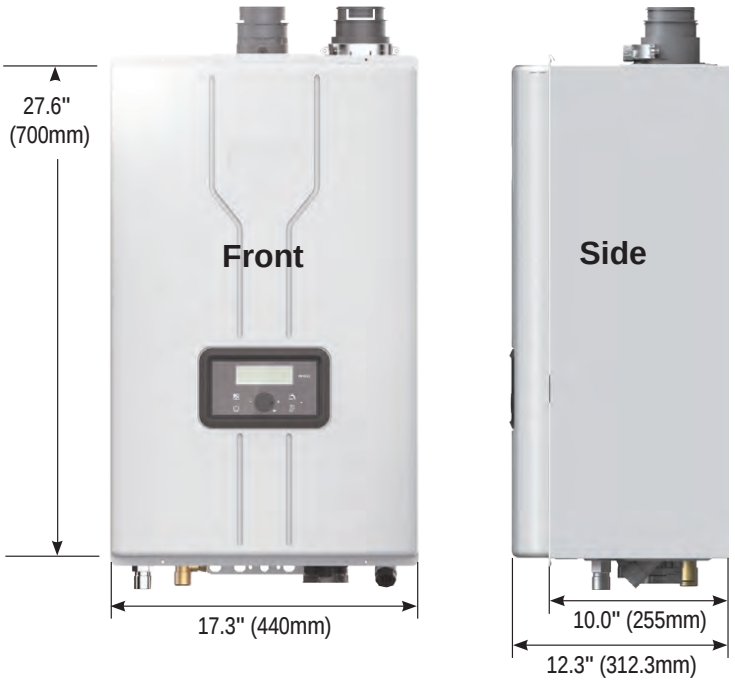
8 ft (2.4m) for each 2" 90° elbow

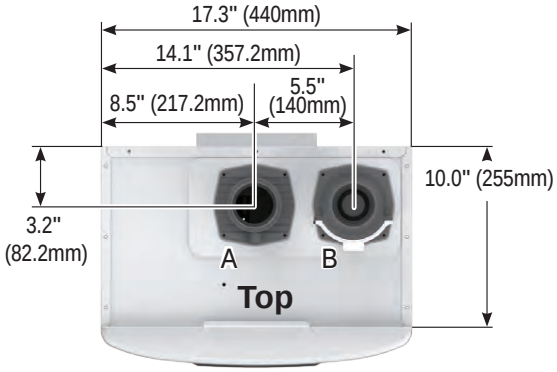
4 ft (1.2m) for each 2" 45° elbow

5 ft (1.5m) for each 3" 90° elbow

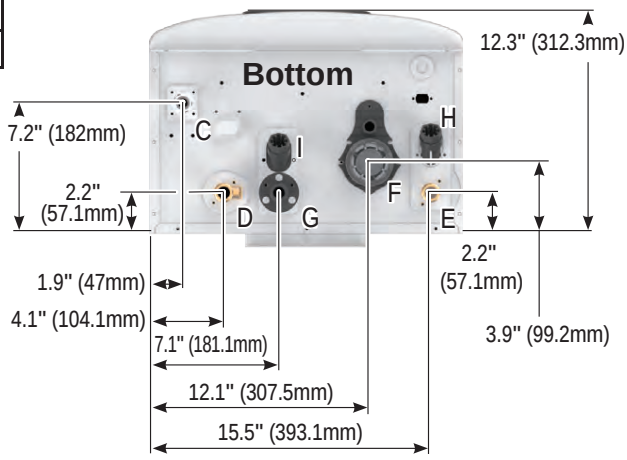
3 ft (0.9m) for each 3" 45° elbow

Model 150



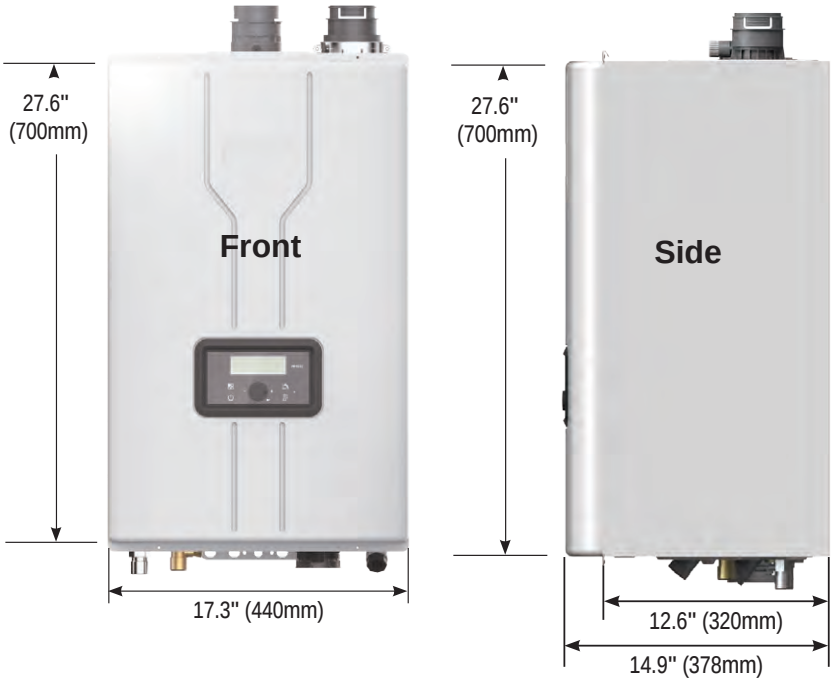


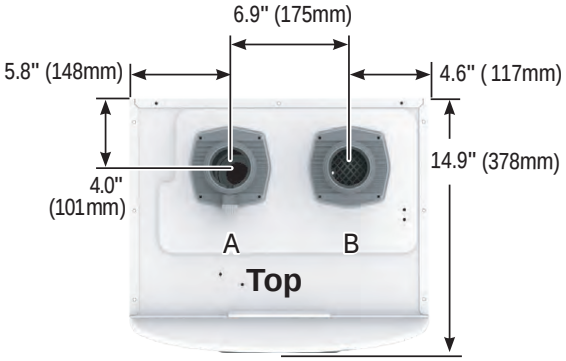
	Description	Size
A	Exhaust	2" PVC
B	Air Intake	2" PVC
C	Gas	3/4" NPT
D	Hot Water Connection	3/4" NPT
E	Cold Water Connection	3/4" NPT
F	Condensate	1/2" NPT
G	Recirculation Return Connection	3/4" NPT
H	Cold Water Filter	-
I	Recirculation Return Filter	-



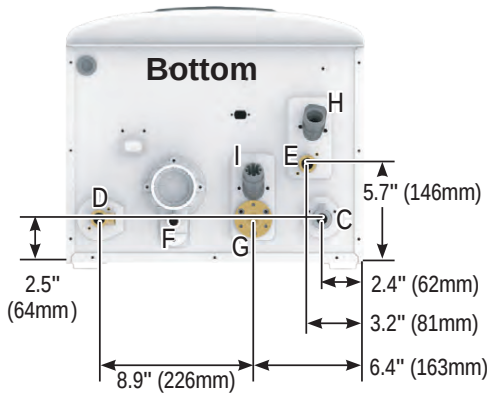
Dimensional Data

Model 199





	Description	Size
A	Exhaust	2" PVC
B	Air Intake	2" PVC
C	Gas	3/4" NPT
D	Hot Water Connection	3/4" NPT
E	Cold Water Connection	3/4" NPT
F	Condensate	1/2" NPT
G	Recirculation Return Connection	3/4" NPT
H	Cold Water Filter	-
I	Recirculation Return Filter	-



LAARS Heating Systems Company

Customer Service and Product Support: **800.900.9276 • Fax 800.559.1583**

Headquarters: **20 Industrial Way, Rochester, NH, USA 03867 • 603.335.6300 • Fax 603.335.3355**

9 Brigden Gate, Halton Hills, Ontario, Canada L7G 0A3 • 905.203.0600 • Fax 905.636.0666

www.Laars.com

Litho in U.S.A. © Laars Heating Systems 26-05 Document 2198C