



Ruud Ultra™ Series Condensing Tankless Water Heater with Built-In Recirculation

Key Features

- **Compatible with 1/2" gas line**
- **Built-in recirculation** — Provides instant hot water at the tap¹ saving time and reducing water waste
- **Timer-Based Recirculation** — Gives homeowner options to program unit timer to match their daily routine
- **Internal Recirculation** — Pumps water through the heat exchanger in a loop to prevent cold water bursts
- **Automatic Freeze Protection** — Pump turns on at 46°F, recirculating internally to keep the unit safe from freezing temperatures
- **Max vent lengths: 100' @ 3", 50' @ 2"** — Means more flexible and versatile installation options
- **Common vent two units** — Fewer wall penetrations, easier to install and more flexible options
- **Vent with Room Air Intake (single units only, not common vented)** — Save time and money on installation
- **Max GPM of 11** – for 199K BTU model
- **Perfect for Replacement** – Install with a crossover valve to use existing cold water line as a return

Specifications

Ruud Model Number		RUTGH-RH11DVLN RUTGH-RH11DVLP	RUTGH-RH10DVLN RUTGH-RH10DVLP
Gas Input Rate	MAX	199,000 BTU/h	180,000 BTU/h
	MIN	18,000 BTU/h	18,000 BTU/h
	High Altitude (2,500-10,000 ft.) ²	180,000 BTU/h	180,000 BTU/h
Uniform Energy Factor (UEF)		0.94	0.94
Gallons Per Minute (GPM)	MAX GPM	11.0 Gal	9.9 Gal
	45°F Rise	8.5 Gal	7.7 Gal
	77°F Rise	5.0 Gal	4.5 Gal
Number of Bathrooms ³		4	3 - 4
Temp. Range		100°F - 140°F	
Type		Indoor Direct Vent (Outdoor Conversion Coming Soon)	
Flue System		Sealed Combustion Direct Vent, Single Vent	
Ignition System		Direct Electronic Ignition / Automatic Flame Sensing	
Burner System		Premixed Metal Fiber Burner	
Gas Valve System		Air ratio valve	
Minimum Flow Activation Flow		0.5 GPM	
Minimum Continuous Flow Rate		0.4 GPM	
Internal Pipe Material		STS 304, Copper Tubing	
Water Holding Capacity		Under 2 Gallon	
Water Pressure	MAX	Hot water 150 psi	
	MIN	15 psi	
Gas Pressure	Nat. Gas	5.0" WC to 10.5" WC	
	LP Gas	9.5" WC to 13.0" WC	
Materials	Casing	Cold Rolled Carbon Steel	
	Heat Exchanger	Heat Exchanger : STS 304	
Safety Devices		Flame Sensor, Overheat Cut Off Limit Switch , Gas Leak Detector sensor, Water Leak Detector Sensor Exhaust Temperature Sensor, Water Temperature Sensor	
Warranty		12-Year Heat Exchanger – Residential 5-Year Heat Exchanger – Commercial 5-Year Parts including Pump 1-Year Labor	



RUTGH-RH10DVLN* & RUTGH-RH11DVLN*

Indoor Direct Vent Model
18,000-199,000 BTU/h
Natural and LP Gas

*For Propane models, replace the N with P when ordering.



Installation Information

Ruud Model Number	RUTGH-RH11DV / RUTGH-RH10DV
Height	28.7"
Width	17.3"
Depth	14.8"
Weight	85 lbs
Max. Vent Run	2"(50ft) / 3"(100ft)
Venting Materials	Schedule 40 PVC, CPVC, PP
Power Supply	120V 60Hz
Max. Power Consumption	172W(82W+90W_PUMP)
Gas Conn.	3/4"
Water Conn.	3/4"

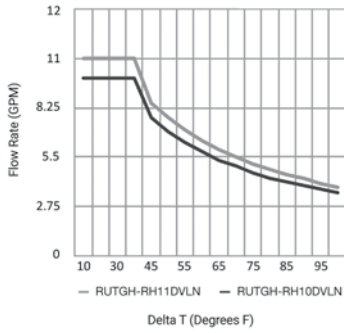
¹ Individual results may vary.

² Natural Gas models only, LP models rated only to sea level.

³ Individual results may vary based on temperature rise demands.



Water Heater Flow Rate Curves

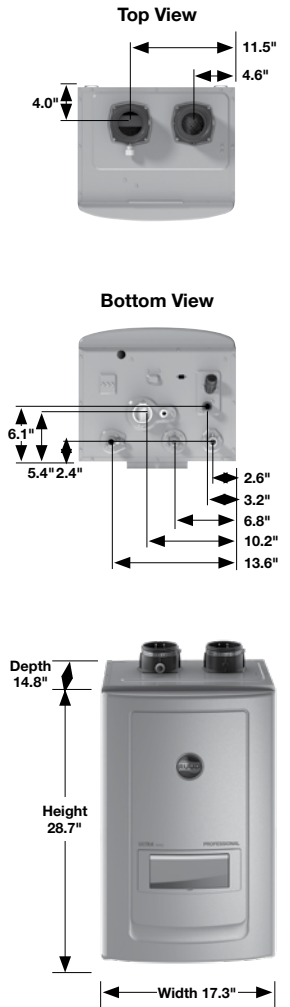


	Temperature Rise (° F)							
Model Number	35°	45°	50°	60°	70°	80°	90°	100°
RUTGH-RH11DV Water Flow (GPM)	11.0	8.5	7.7	6.4	5.5	4.8	4.3	3.8
RUTGH-RH10DV Water Flow (GPM)	9.9	7.7	6.9	5.8	5.0	4.3	3.9	3.5

Above estimates are for sizing purposes only.

Model #	Inlet Temp. 37-47°		Inlet Temp. 47-57°		Inlet Temp. 57-62°		Inlet Temp. 62-77°	
	Max. GPM	Approx. Usage	Max. GPM	Approx. Usage	Max. GPM	Approx. Usage	Max. GPM	Approx. Usage
RUTGH-RH11DVL	4.8	☺☺	5.5	☺☺☺	6.4	☺☺☺☺	7.7	☺☺☺☺☺
RUTGH-RH10DVL	4.3	☺☺	5.0	☺☺☺	5.8	☺☺☺☺	6.9	☺☺☺☺☺

Dimensions



Venting

Maximum Vent Length for Direct Vent (2 Pipe)

Number of Water Heaters Common Vented	PIPE SIZE		
	2"	3"	4"
1	50'	100'	N/A
2	N/A	50'	83'

NOTE: Minimum vent length 7' for 2" and 3" venting.

Venting Materials Allowed: PVC, CPVC, PP

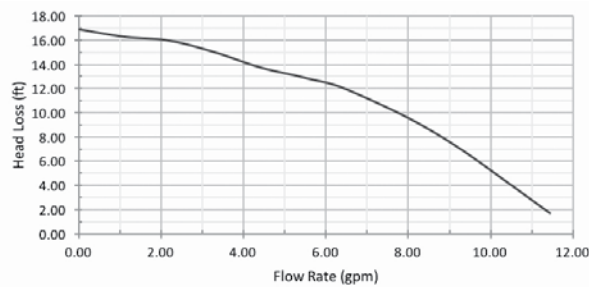
	Equivalent Elbow Lengths in Ft. of Straight Pipe	
	2"	3"
90°	8'	5'
45°	4'	2.5'

Recirculation Lengths


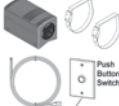




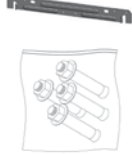
Maximum Equivalent Recirculation Length	
3/4"	500'
1/2"	200'

NOTE: Refer to fitting manufacturer guide for pressure loss in fittings expressed as equivalent feet.

Recirculation Pump Head Loss Curve



Parts & Accessories

Condensate Neutralizer	On-Demand Activation Kit	Quick Connect Cable	Vent Screens	Service & Pressure Relief Valves	Crossover Valve	Bracket and Anchors
 SP12151 – (Optional)* Safely dispose of condensate	 SP20941 – (Optional) Converts the timer based pump to on-demand function, includes wall switch for activation	 SP20892 – (Optional) For 2 unit manifolding	 SP20895 – 2" SP20896 – 3" (Included)	 RTG20220AB – (Required)	 RTG20285 – (Optional) For installation using existing plumbing	 (Included)

*Check your local plumbing codes

In keeping with its policy of continuous progress and product improvement, Ruud reserves the right to make changes without notice.