

RESIDENTIAL



■ FLEXIBLE VENTING OPTIONS

- Concentric or Schedule 40 PVC/CPVC
- Direct Vent (Concentric and Twin Pipe)
- Non-Direct Vent (Room Air)
- Common Vent (Direct Vent and Room Air)
- Maximum Equivalent Vent Lengths:

Twin Pipe (PVC/CPVC and PP)

| | | |
|--------------|---------------|---------------|
| Vent Sizes | 2 in. (51 mm) | 3 in. (76 mm) |
| Vent Lengths | 75 ft (23 m) | 150 ft (46 m) |

Concentric

| | | |
|--------------|---------------|---------------|
| Vent Sizes | 2 in. X 4 in. | 3 in. X 5 in. |
| Vent Lengths | 75 ft (23 m) | 150 ft (46 m) |

■ EASE OF INSTALLATION AND SERVICEABILITY


- **Smart-Sense™**: Adaptive gas valve technology - No gas conversion kit required.
- **Versa-Vent™**: Outdoor vent cap adapts to any SENSEI™ RX Series model for outdoor installation.
- **Smart Connect™**: Allows you to connect your phone or tablet to SENSEI™ RX Series Via Bluetooth® using Rinnai Central™ app.
- **Quick-Flush™**: Provides an efficient flushing procedure to make periodic preventive maintenance a simple task to perform.

■ OPTIONAL ACCESSORIES

| Description | Part Number | Description | Part Number | Description | Part Number |
|---|-------------|-----------------------------------|-------------|------------------------|-------------------------|
| Isolation Valves and PRV | MIVK-T-LW | Pipe Cover* | PCD11-SHS | Controllers | MC-601-BK/W, MC-195T-US |
| Outdoor Vent Cap* | RXOVC | Recess Box for SENSEI™ RX Series* | RGBCTWHRX | Condensate Neutralizer | 804000074 |
| Dedicated Return with Isolation Valves and PRV* | 107000639 | Bottom Plate for Pipe Cover* | 109001364 | Scale Cutter | 103000038 |
| Retrofit Door for RX in RGB-CTWH-4* | 104000335 | Wireless Module* | RWM200 | Scale Cutter Refill | 103000039 |
| Retrofit Door for RX in RGB-CTWH-3, 2, 1* | 104000336 | Recirculation Push Button* | RPB200 | OPU Switch | REU-OPU3 |
| Gas Conversion Kit (Labels Only)* | 104000330 | EZConnect Cable* | REU-EZC-3 | Leak Detection Kit* | RXLeakKit |

*New—for SENSEI™ RX/CX Series Water Heaters

SUPER-HIGH-EFFICIENCY (CONDENSING) TANKLESS WATER HEATER

| | |
|-------------------------------|---|
| Installation Type | Internal (Indoor) Residential Applications External (Outdoor) Residential Applications with Outdoor Vent Cap |
| Model Numbers | RXP199i (REU-NBP3237FF-US) RXP160i (REU-NBP2530FF-US) |
| Approved Gas Types | Natural and Propane |
| Efficiency |  UEF: 0.98 (RXP199i) 0.97 (RXP160i) |
| High Altitude Approved | Up to 10,200 ft (3,109 m) |
| Water Flow Control | Water Flow Sensor, Electronic Water Control and Bypass Control |
| Controller | Standard: Integrated Controller Optional: MC-195T-US, MC-601-BK/W |
| Certifications | AHRI, ANSI Z21.10.3, CSA 4.3, and ENERGY STAR® |

Warranty

- Heat Exchanger: 15 years or 12,000 operation hours, whichever occurs first
- All Other Parts and Components: 5 years
- Reasonable Labor: 5 years* *Requires product to be registered within 90 days of installation or labor warranty defaults to 1 year

Safety Devices

Flame Failure - Flame Rod, Boiling Protection, Combustion Fan RPM Check, Over Current - Glass Fuse, Remaining Flame (OHS) and Automatic Frost Protection

Included with Purchase

Tankless Water Heater, Wall Mounting Bracket, Vent Screens (x2), Screws (x2), Self-Tapping Screws (x4) and Thermal Bypass Valve

Additional Features

- Mobile Home Certified
- Ultra Low NOx
- Tankless Rack System™ Compatible
- 1/2 in. (13 mm) Gas Line Compatible
- Complies with South Coast Air Quality Management District 14 ng/J or 20 ppm NOx Emission Levels
- EZConnect—1 RXP and 1 RX as System



CERTIFIED TO ANSI Z21.10.3 — CSA 4.3

SENSEI™ RXP TECHNICAL SPECIFICATIONS

| SPECIFICATION | RXP199i | RXP160i | |
|------------------------------------|--|------------------------------------|--|
| Dimensions - w, h, d | 18.5 in. x 25.8 in. x 11.4 in. (470 mm x 654 mm x 290 mm) | | |
| Minimum Gas Consumption Btu/h | 15,000 | | |
| Maximum Gas Consumption Btu/h | 199,000 | 160,000 | |
| Flow Rate ¹ (Min - Max) | 0.13 - 11.0 GPM (0.5 - 42 L/min) | 0.13 - 9.0 GPM (0.5 - 34 L/min) | |
| Weight | 58 lb (26 kg) | 57 lb (26 kg) | |
| Sound Level | 49 dB | 48 dB | |
| Electrical | Normal | 98 W | |
| | Normal with Pump Operation | 170 W | |
| | Standby | 1.3 W | |
| | Freeze Protection | 174 W | |
| | Max Current | 4 Amps | |
| | Fuse | 10 Amps | |
| Temperature | <ul style="list-style-type: none"> Minimum: 98° F (37° C) Default (Crossover Mode: 120°F (49°C)) Maximum: 120° F (49° C) Default 140° F (60° C) With Parameter Adjustment | | |
| By-Pass Flow Control | Electronic | | |
| Gas Supply Pressure ² | <ul style="list-style-type: none"> Natural: 3.5 in. w.c. - 10.5 in. w.c. Propane: 8.0 in. w.c. - 13.5 in. w.c. | | |
| Ignition System | Direct Electronic Ignition | | |
| Electronic Connections | <ul style="list-style-type: none"> Appliance: AC 120 Volts, 60Hz. Temperature Controller: DC 12 Volts (Digital) | | |
| Water Supply Pressure | <ul style="list-style-type: none"> Minimum: 15 PSI (Recommended 50 PSI for max performance) Maximum: 150 PSI | | |
| Service Connections | <ul style="list-style-type: none"> Gas Supply: 3/4 in. (19 mm) NPT Cold Water Inlet: 3/4 in. (19 mm) NPT Hot Water Outlet: 3/4 in. (19 mm) NPT Condensate Drain: 1/2 in. (13 mm) NPT | | |
| Clearances | <ul style="list-style-type: none"> Top: 2 in. (51 mm)* Bottom/Ground: 12 in. (305 mm) Front: 0 in.** Back: 0 in. Sides: 2 in. (51 mm)*** Vent: 0 in. | | |

* 0 in. from vent components.

** Clearance for servicing is 24 in. (610 mm) in front of water heater.

*** Add 0.25 in. (6.35 mm) for recess box.

¹ Activation flow rate may vary slightly depending on the temperature setting and the inlet water temperature.

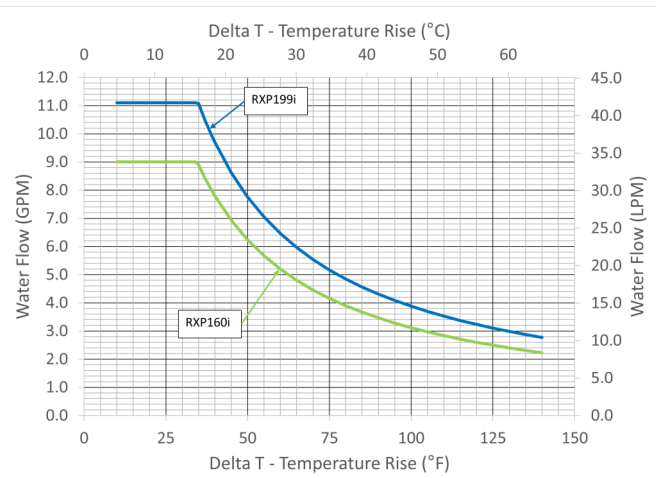
² The maximum gas supply pressure must not exceed the value specified by the manufacturer.

Rinnai products are continually being updated and improved; therefore, specifications are subject to change without prior notice.

SENSEI™ RXP WATER FLOW CURVE

Flow curves apply only to incoming water temperatures of 70° F (21° C) or less.

For incoming water temperatures greater than 70° F (21° C), please contact Rinnai.

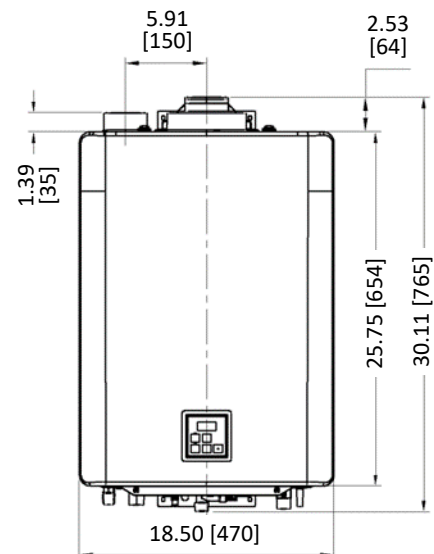


NOTE: Maximum flow rates may vary based on set temperature, Delta T and altitude.

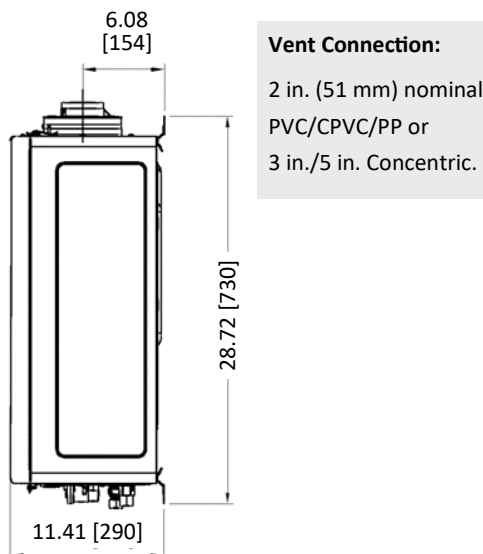
SENSEI™ RXP DIMENSIONS

in. (mm)

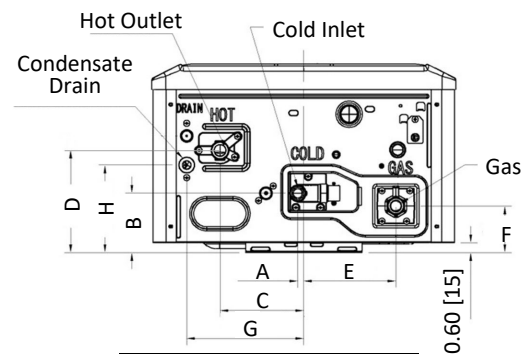
FRONT



SIDE

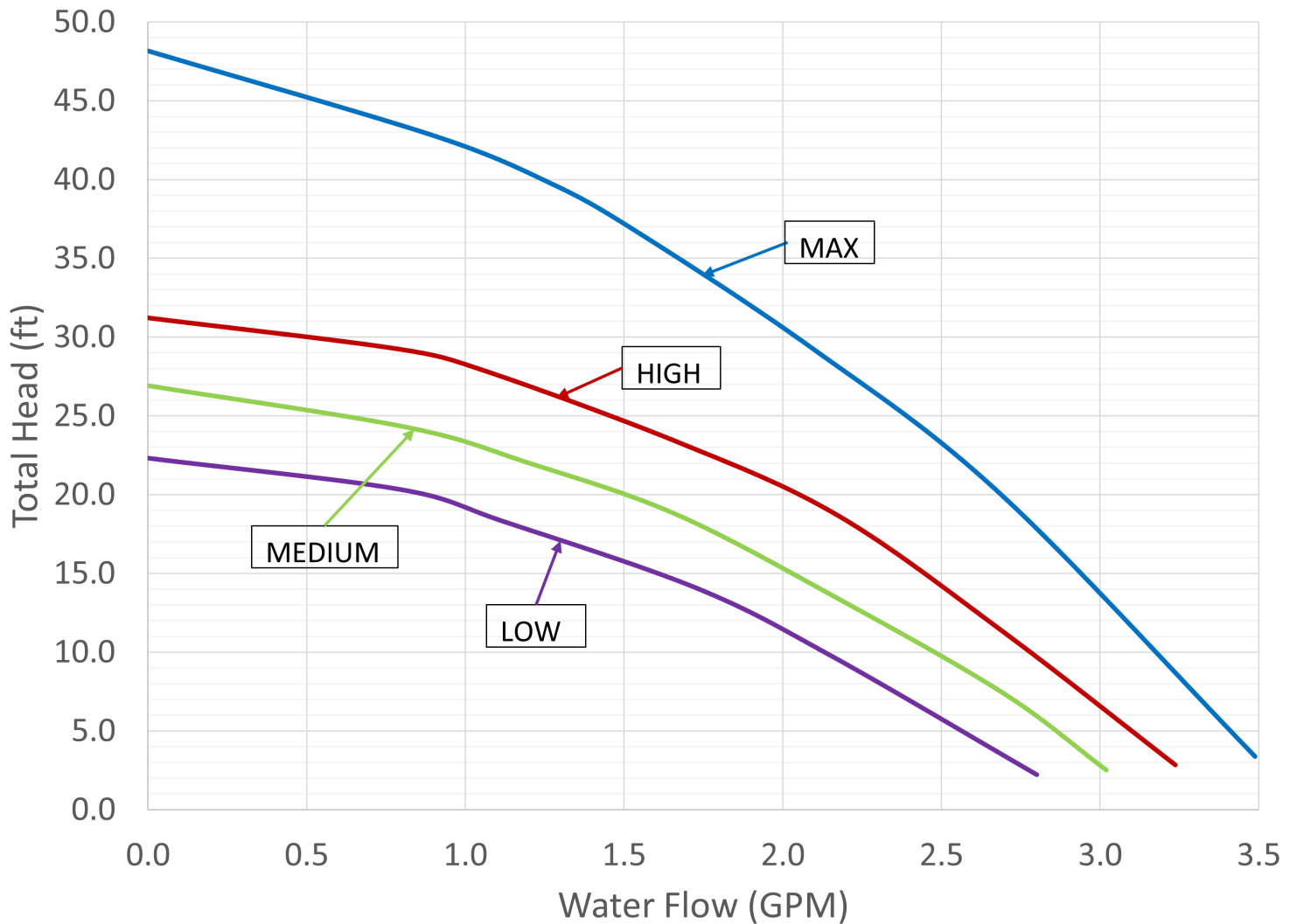


BOTTOM



| Connection | | in. | mm |
|------------|---|------|-----|
| COLD | A | 0.37 | 9 |
| | B | 3.60 | 91 |
| HOT | C | 5.10 | 130 |
| | D | 6.20 | 158 |
| GAS | E | 5.60 | 142 |
| | F | 2.83 | 72 |
| DRAIN | G | 7.13 | 181 |
| | H | 5.32 | 135 |

SENSEI™ RXP PUMP PERFORMANCE AND PUMP + TANKLESS PERFORMANCE CURVE



Recirculation Pump Control

- Smart-Circ.™ “learns” users’ hot water patterns to activate recirculation.
- Manual schedule selection is available with Accessory controllers (MC-195T or Wi-Fi module).

Internal Multi-Speed DC Pump

Integrated pump allows for recirculation through a dedicated return line or crossover with thermal bypass valve.

Maximum Recirculation Pipe Lengths

- 400 equivalent feet for 3/4 in. pipe diameter
- 100 equivalent feet for 1/2 in. pipe diameter

Take equivalent elbow lengths into consideration when calculating pipe length.

For dedicated return lines: Total length includes both hot water supply and dedicated return lines.

Cross-over mode: Total length includes both hot water supply and cold water piping length from the tankless water heater to the thermal bypass valve. Cross-over mode requires the use of a thermal bypass valve (included).