



119 Gallon Model

80 Gallon Model

### AUTOMATIC CIRCULATING TANK WATER HEATER

Installation Type	Internal (Indoor) Commercial Applications
Model Numbers	CHS19980RiN, CHS19980RiP, CHS199100RiN, CHS199100RiP
Approved Gas Types	Natural and Propane
Maximum System Gas Consumption	Up to 199,000 BTU/h
Storage Capacity	Available in both 80 and 119 gallon
Thermal Efficiency	80%
High Altitude Approved	Up to 5,400 Ft (1,646 M)
Water Flow Control	Water Flow Sensor, Electronic Water Control and Bypass Control
Controller	Standard: Integrated Controller Optional: MC-91-2US
Certifications	AHRI, ANSI Z21.10.3, CSA 4.3
Storage Tank	<ul style="list-style-type: none"> <li>• 2 in. Eco-friendly foam insulation</li> <li>• Glass-lined inner tank</li> <li>• 1-1/2 in. MNPT dielectric hot and cold connections</li> <li>• Pre-installed temperature &amp; pressure relief valve</li> <li>• Brass drain valve</li> <li>• Dual magnesium anode rods</li> <li>• Hand hole clean-out</li> </ul>
Warranty	<ul style="list-style-type: none"> <li>• Heat Exchanger: 5 years</li> <li>• Tank: 6 years</li> <li>• All Other Parts and Components: 5 Years</li> <li>• Reasonable Labor: 1 Year</li> </ul> (Refer to the Installation and Operation Manual for further warranty information.)
Safety Devices	Flame Failure - Flame Rod, Boiling Protection, Combustion Fan RPM Check, Over Current - Glass Fuse, Remaining Flame (OHS) and Automatic Freeze Protection
Venting Options	6 in. Category 1 B-Vent

### EASE OF INSTALLATION AND SERVICEABILITY

- Optional Wi-Fi Technology for Remote Monitoring and Management
- Included Electric Conduit, Gas Flex Line, and Gas Dirt Leg
- DuoSmart™ Digital Controller
- 36 in. Long Gas Swivel Flex Line rotating 360° for installations

### VENTING

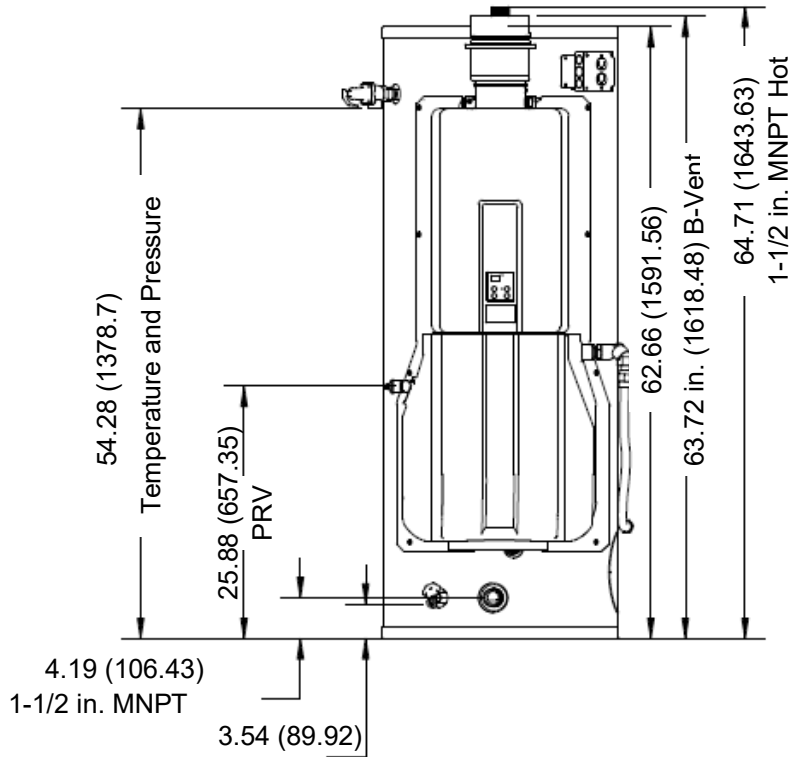
- 6 in. Category 1 B-Vent
- Included Intake Filter and Exhaust Connector (IFEC) appliance adapter



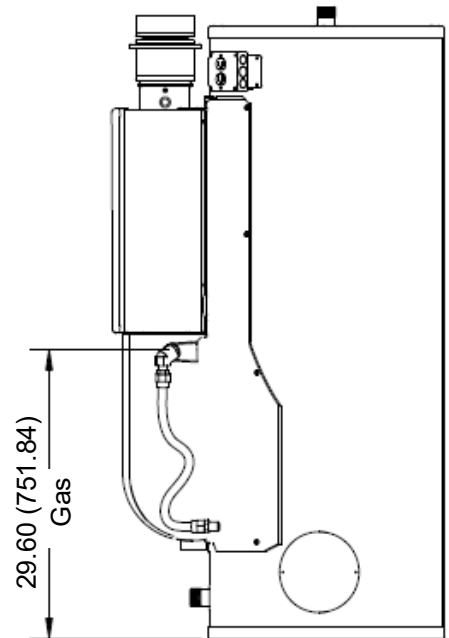
CERTIFIED TO ANSI Z21.10.3 — CSA 4.3

**DIMENSIONS (80 GALLON MODELS) IN. (MM)**

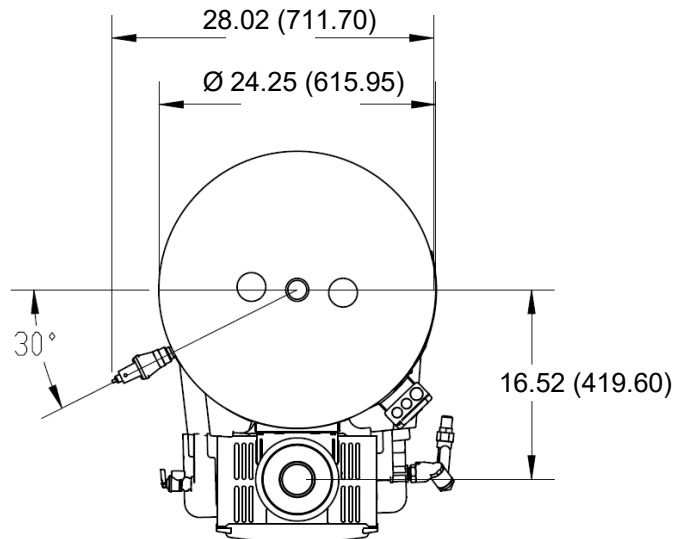
**FRONT**



**SIDE**



**TOP**

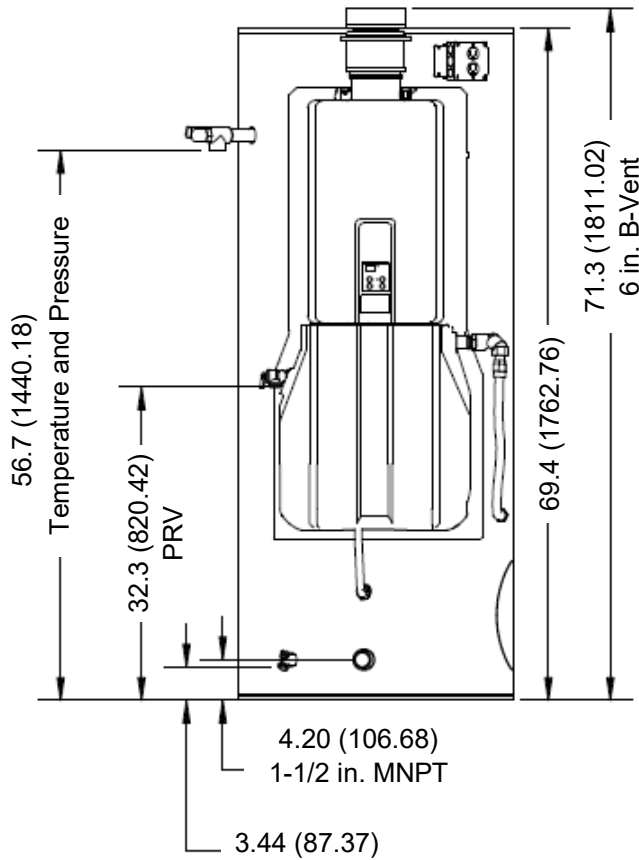


**RECOVERY CAPACITIES**

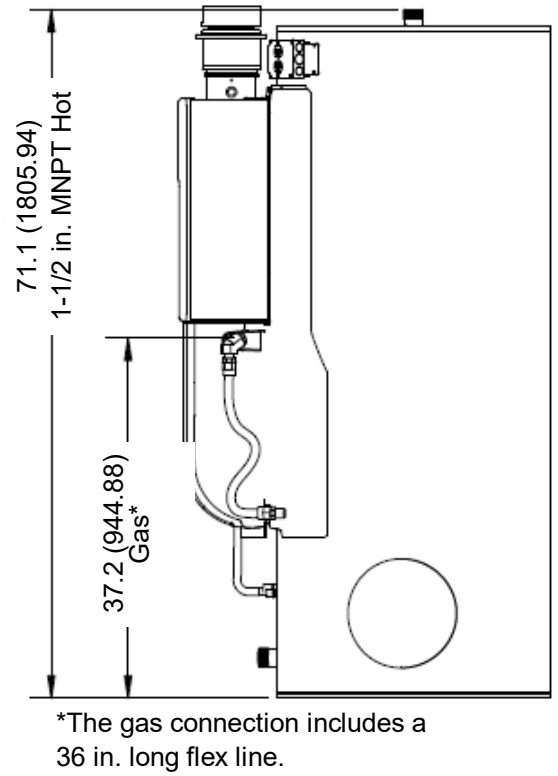
Tank Capacity		U.S. GALLON/HR LITERS/HR AT TEMPERATURE RISE INDICATED												
		°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F	110°F	120°F	130°F	140°F
		°C	17°C	22°C	28°C	33°C	39°C	45°C	50°C	56°C	61°C	67°C	72°C	78°C
CHS19980RiN/ CHS19980RiP	78.6 U.S. Gals.	GPH	643	482	386	322	276	241	214	193	175	161	148	138
	298 Liters	LPH	2,435	1,826	1,461	1,217	1,044	913	812	730	664	609	562	522

**DIMENSIONS (119 GALLON MODELS) IN. (MM)**

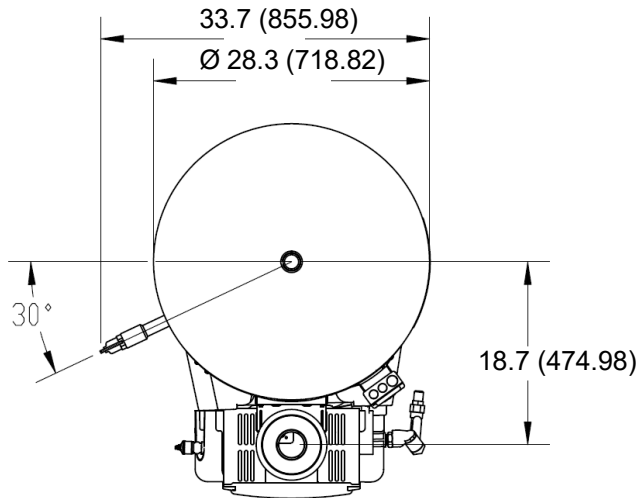
**FRONT**



**SIDE**



**TOP**



**RECOVERY CAPACITIES**

Tank Capacity		U.S. GALLON/HR LITERS/HR AT TEMPERATURE RISE INDICATED												
		°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F	110°F	120°F	130°F	140°F
		°C	17°C	22°C	28°C	33°C	39°C	45°C	50°C	56°C	61°C	67°C	72°C	78°C
CHS199100RiN/ CHS199100RiP	116.2 U.S. Gals.	GPH	643	482	386	322	276	241	214	193	175	161	148	138
	440 Liters	LPH	2,435	1,826	1,461	1,217	1,044	913	812	730	664	609	562	522

# TECHNICAL SPECIFICATIONS

Product Number		CHS19980RiN	CHS19980RiP	CHS199100RiN	CHS199100RiP
Product Description		Automatic Circulating Tank Water Heater			
Installation Type		Indoor			
Minimum Gas Consumption Btu/hr (kW/hr)		21,500 (6.3)			
Maximum Gas Consumption Btu/hr (kW/hr)		199,000 (58.3)			
Tank Volume		78.6 Gallons (298 Liters)		116.2 Gallons (440 Liters)	
First Hour Delivery at 100°F Rise		249 Gallons (942 Liters)		276 Gallons (1,046 Liters)	
Temperature Setting		120°F (49°C) to 180°F (82°C)			
Product Weight		320 lb (145 kg)		455 lb (208 kg)	
Noise Level		47 dB			
System Electrical Data	Normal	265 W			
	Standby	2 W			
	Freeze Protection (tankless)	288 W			
	Max Current	9.0 A			
	Fuse	Tankless Engine - 10 A			
Electric Connections		Appliance: AC 120 Volts, 60Hz.			
By-Pass Control		Electronic			
Gas Supply Pressure		Natural Gas: 4.0 - 10.5 inch W.C.	Propane: 8.0 - 13.5 inch W.C.	Natural Gas: 4.0 - 10.5 inch W.C.	Propane: 8.0 - 13.5 inch W.C.
Connections		Gas Supply Inlet - 3/4 in. MNPT Hot Water Outlet - 1-1/2 in. MNPT Cold Water Inlet - 1-1/2 in. MNPT			
Ignition System		Direct Electronic Ignition			
Maximum Water Supply Pressure		150 PSI			
Meets or exceeds energy efficiency requirements of ASHRAE 90.1 (current standard), C.E.C. Listed 80% Recovery Efficiency.					