

Tankless Heavy-Duty Commercial Model

Designed specifically for heavy-duty commercial applications. Fully modulating, gas-fired, tankless, water heaters with sealed combustion (optional) and power vented flue. Can be installed either indoors or outdoors. Capable of supplying hot water for domestic hot water systems (directly or indirectly) and can be used with water storage tanks, recirculation systems, and/or combined domestic & heating applications.

FEATURES:

PRIMARY HEAT EXCHANGER IS CONSTRUCTED OF COMMERCIALGRADE COPPER

- Stronger than standard copper and more resilient against erosion
- Copper provides 25x better heat transfer than stainless steel thus stabilizing outgoing water temperature quicker and reducing pressure drop across the heat exchanger.

CONTINUOUS MAXIMUM FLOW RATES UP TO 14.5 GPM

EASY-LINK UP TO 4 UNITS

- Multi link up to 10 units with TM-MC01 multi unit controller

COMBINED INDOOR/ OUTDOOR MODELS

AVAILABLE IN NATURAL GAS OR PROPANE (LP)

ASME MODELS AVAILABLE

LOW NO_x EMISSIONS

COMPLIES WITH LEAD FREE STANDARDS

SAFETY FEATURES:

- Built in Freeze Protection
- Manual Reset Hi Limit (Set at 194°F)
- Overheat Cutoff Fuse
- Inlet and Outlet Thermistors for Constant Temperature Monitoring
- Air Fuel Ratio Rod
- GFI, Fuse & Surge Absorber
- Flame Sensor

VENTING AND COMBUSTION

- 5" Category III Stainless Steel
- Vertical or Horizontal Installation
- 50' Max Length, 5 elbows max (90° elbows = 5' equivalent length)
- Power Vent
- Electronic Ignition - No Pilot Light
- 5" Combustion Air Intake (with optional kit)

OPTIONAL ACCESSORIES

- Multi-Unit Controller
- Remote Temperature Controller
- Direct Vent Conversion Kit
- Pipe Cover
- Vent Cap
- Backflow Preventor

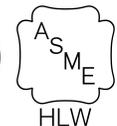
WARRANTY

- 6-year limited warranty on heat exchanger in commercial applications
- 5-year warranty on all parts



MODELS

TM50-N
TM50-P
TM50-ASME-N
TM50-ASME-P



ANSI Z21.10.3

CSA 4.3

MODEL NUMBER	FUEL TYPE	GAS CONSUMPTION INPUT		THERMAL EFFICIENCY	INLET GAS PRESSURE		GPM**
		MIN. BTU/H	MAX. BTU/H		MIN. IN. W.C.	MAX. IN. W.C.	
T-M50-N	Natural	15,000	380,000	80%	4.0	10.5	0.5 - 14.5
T-M50-P	Propane	15,000	380,000	82%	8.0	14.0	0.5 - 14.5
T-M50-ASME-N*	Natural	15,000	380,000	80%	4.0	10.5	0.5 - 14.5
T-M50-ASME-P*	Propane	15,000	380,000	82%	8.0	14.0	0.5 - 14.5

MODEL NUMBER	DIMENSIONS (INCHES)			VOLT	AMP	FLUE***	INTAKE	HOT/COLD GAS CONN.	APPROX. SHIPPING WEIGHT (LBS)
	HEIGHT	WIDTH	DEPTH						
T-M50-N	25-1/4	24-7/8	12-3/4	120	1.48	5" O.D.	5" O.D.	1" NPT	113
T-M50-P	25-1/4	24-7/8	12-3/4	120	1.48	5" O.D.	5" O.D.	1" NPT	113
T-M50-ASME-N*	25-1/4	24-7/8	12-3/4	120	1.48	5" O.D.	5" O.D.	1" NPT	113
T-M50-ASME-P*	25-1/4	24-7/8	12-3/4	120	1.48	5" O.D.	5" O.D.	1" NPT	113

All dimensions in inches.

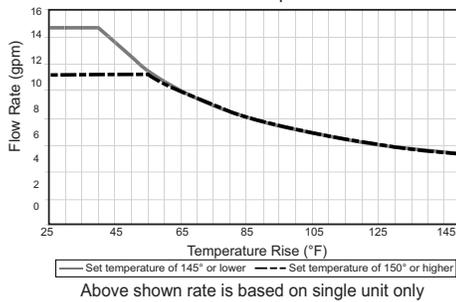
*ASME models

**Current numbers based on factory testing, 0.4 GPM required for continuous fire after initial ignition.

15 - 150 psi water pressure. Pressure only relief valve requires (Min. 380,000 BTUs. 150 PSI). Min 40 PSI or above recommended for maximum flow.

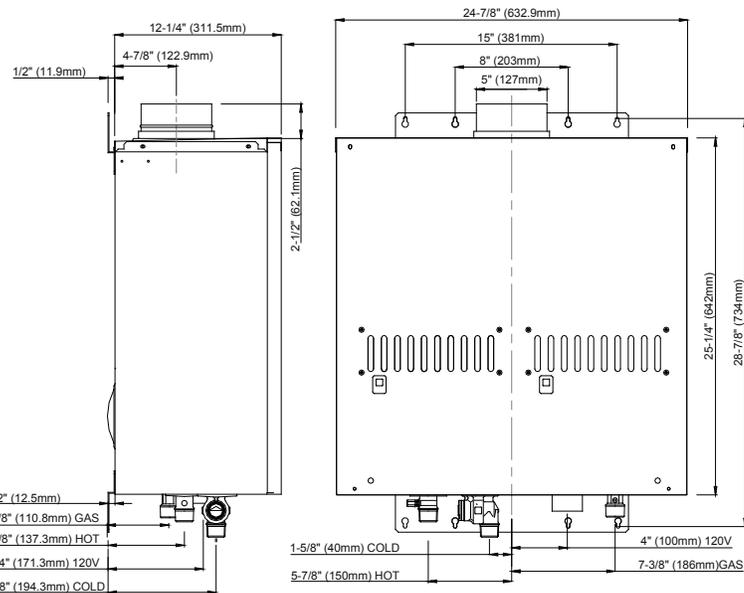
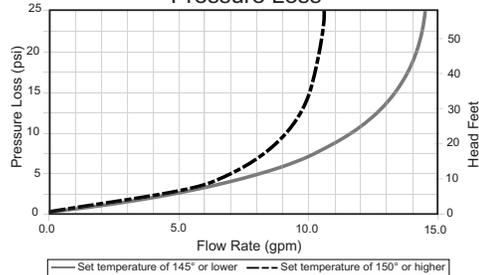
*** Category III required

Flow Rate Vs. Temperature Rise



Above shown rate is based on single unit only

Pressure Loss



Suggested Specification

Water heater(s) shall be Model _____ as manufactured by Takagi. The water heater(s) shall be a copper coil integral fin and tube construction with quick release brass or bronze waterways. Heater(s) will be factory assembled and tested. The heater shall be vented with 5" Stainless steel Category III vent pipe a distance not to exceed 50' (equivalent) feet terminating vertically or horizontally as prescribed. Intake air with optional direct vent kit may be of such material as PVC not to exceed a total of 50' (equivalent). The heater(s) shall be controlled by onboard solid state printed circuit board monitoring incoming and outgoing temperatures with factory-installed thermistors, sensing and controlling flow rate to set point temperature with control both air and gas mixture inputs to maintain thermal combustion efficiency. Unit also consists of ground fault interrupter, inline fusing, spark ignition and sensor system, aluminized stainless steel burners, air-fuel ratio rod, Hi limit switch, modulating and proportional gas valves, freeze protection sensor and heating block and overhead cutoff fuses. The water heater(s) shall be CSA listed, and meet the energy efficiency requirements of ASHRAE 90. 1b-1992.