



# Model T-K3-SP



## Description/Application

Fully modulating, gas fired, tankless, on demand water heater with power-vented flue. Can be installed either indoors or outdoors, and used in either residential or commercial applications. Supplies hot water to: domestic hot water systems (directly or indirectly using water storage tanks), recirculation systems, hydronic heating systems, radiant floor heating systems, and/or combined domestic & heating applications, etc.

## Fuel: NG or LP

### Safety Features

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

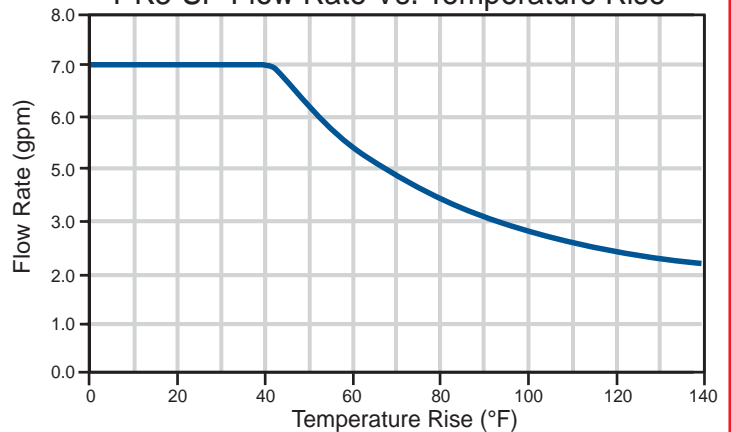
### Venting and Combustion

- 4" Category III Stainless Steel
- Vertical or Horizontal Installation
- 50' Max Length, 5 elbows max (90° elbows = 5' equivalent length)
- Power Vent
- Electronic Ignition
- 54 db Noise Level at Max Output

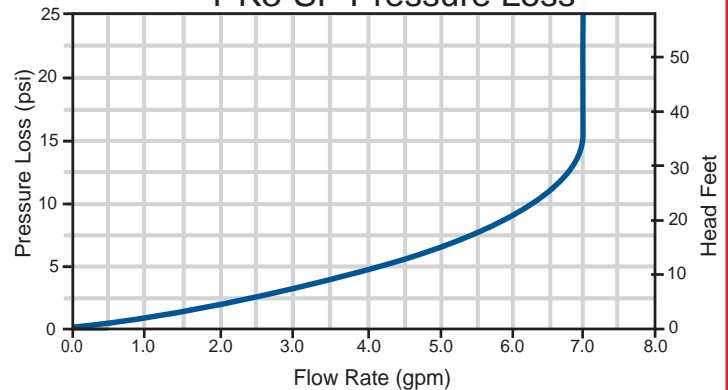
### Accessories

- TK-BF01 Vent Damper
- TK-TV04 Outdoor Vent Cap
- TK-RB01 Recess Box (optional)
- TK-PC01 Pipe Cover (optional)
- TK-KPWL4 & TK-PPWH4 T-Vent Terminations (optional)
- TK-RE02 Temperature Remote Control (optional)
  - 150' Max Distance From Water Heater
  - Non-Polarized 18 Gauge Control Wiring

### T-K3-SP Flow Rate Vs. Temperature Rise



### T-K3-SP Pressure Loss



## Temperature Settings

**Dip Switch:** 113°F 122°F (default) 140°F 167°F

### TM-RE02 Remote Controller

Default Mode: 99°F 100°F 102°F 104°F 106°F 108°F 110°F 111°F 113°F 115°F 117°F

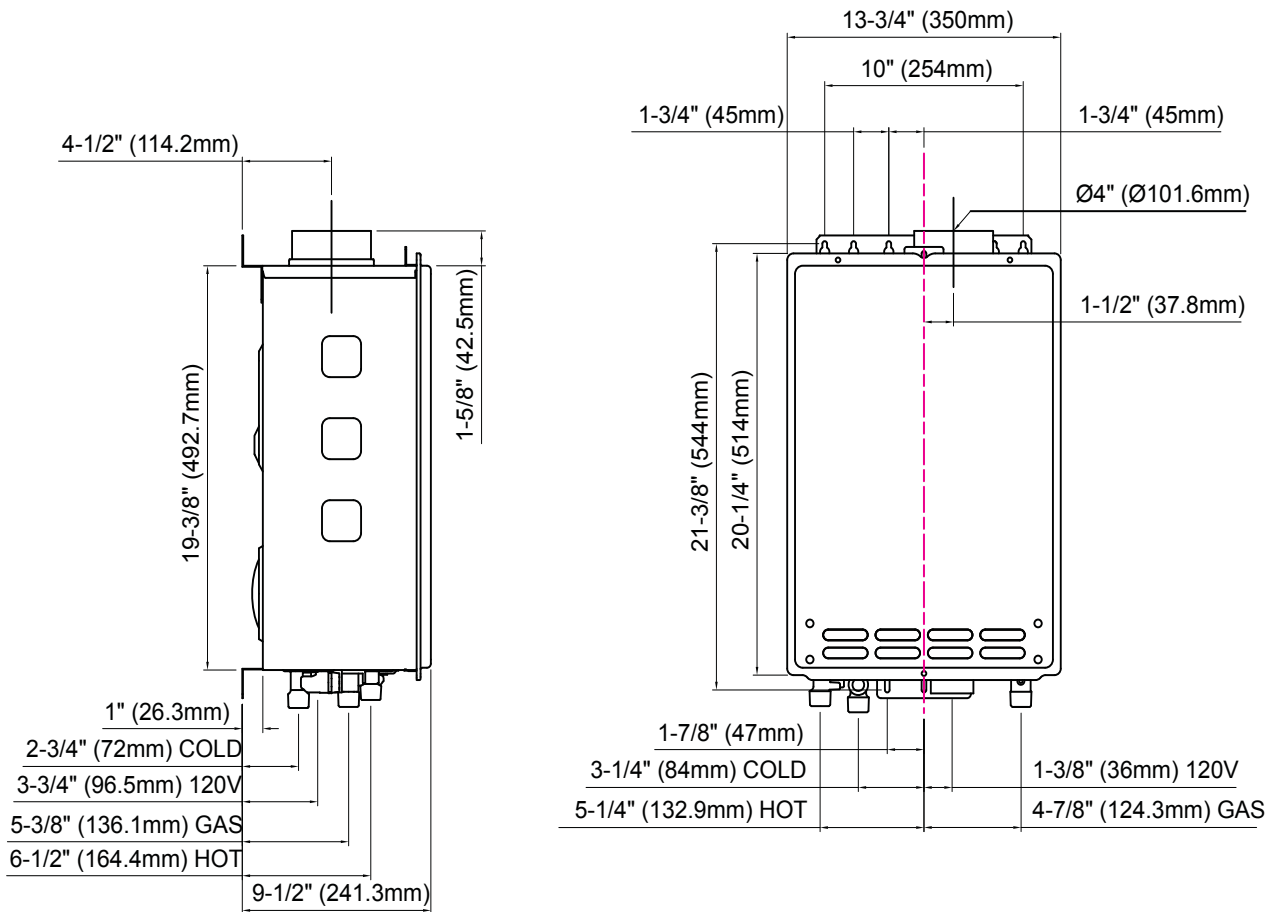
122°F 131°F 140°F 158°F 167°F

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+Met SCAQMD rule 1146.2 (certified by BR Lab)



# Model T-K3-SP



### T-K3-SP:

	HT	W	D	WT	Volt	Amp	Flue	(Hot/Cold/Gas) Connections	AFUE
	20.5"	13.8"	8.5"	40 lbs.	120	0.77	4" O.D.*	3/4" NPT	NG 0.80 LP 0.83
	Input		Input		Energy Factor		Thermal Eff.	Min Press	Max. Press
	Max BTU/h		Min BTU/h						
NG	190,000		11,000		0.82		82.3%	5.0" W.C.	10.5" W.C.
LP	190,000		11,000		0.82		83.8%	8.0" W.C.	14.0" W.C.
	GPM		Water PSI		Coil Cap				
	0.5 - 7.0**		15 - 150 PSI***		≈0.2 Gallons				
<b>Clearances</b>	<b>Top</b>		<b>Bottom</b>		<b>Front</b>		<b>Back</b>		<b>Sides</b>
<b>Indoor</b>	12"		12"		4"		1"		2"
<b>Outdoor</b>	36"		12"		24"		1"		2"

\* Category III Required \*\*Current numbers based on factory testing, 0.4 GPM Required for Continuous Fire After initial Ignition.

\*\*\*Pressure Only Relief Valve Requires (Min. 200,000 BTUs. 150 PSI). Min 40 PSI or above recommended for maximum flow.

Warranty: **10 years Heat Exchanger, 5 years Parts (for Residential Use) - 3 years Heat Exchanger, 3 years Parts (for Commercial Use)**

### Specification

Water heater(s) shall be Model T-K3-SP as manufactured by Takagi Industrial Company, Inc. 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 4" Stainless steel Category III vent pipe a distance not to exceed 50' (equivalent) feet terminating vertically or horizontally as prescribed.

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 cut-off fuses.

The water heater(s) shall be CSA listed, exceeds the energy efficiency requirements of ASHRAE 90. 1b-1992 and listed by SCAQMD rule 1146.2 Low NOx.