

Friedrich® FDTG/FDTG-R Series High Efficiency Non-Condensing Tankless Gas Water Heaters

EASY INSTALLATION

- **Industry Leading!** 43' vent run capability **Ready for Retrofits**
- **Industry Best!** 1/2" side to side clearance allows you to safely work in spaces the competition can't
- 1/2" Gas line compatibility up to 24 ft (subject to local code)
- Universal Venting Compatibility with Metal Fab, ProTech® and UBBINK standard concentric venting for easier tankless to tankless replacements

KEY FEATURES

- **Exclusive!** Hot-start Programming™ ensures the unit is in a ready state between back-to-back usage, minimizing any cold water bursts
- Built-in EcoNet® Wi-Fi technology for direct control from your device (on select models)
- LeakGuard® – All-inclusive leak detection and prevention system that detects any leak that comes from the unit (on indoor Wi-Fi models)
- Available built-in recirculation models (FDTG-R) for no-wait hot water at the tap and up to 12,000 gallons of water savings¹



Indoor DV

Outdoor

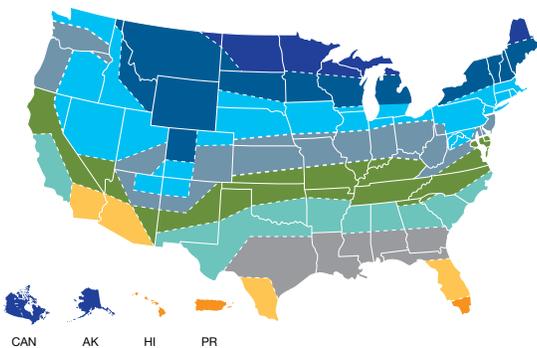
FDTG/FDTG-R Series Models

Indoor & Outdoor Models
11,000-199,900 BTU/h
Natural Gas and
Liquid Propane Models*

*Swap P for N in model number for Liquid Propane model



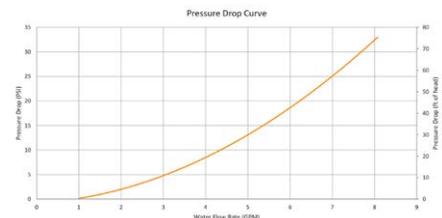
U.S. Ground Water Temperature Zone Map



Average Flow Rates (GPM) by Application

Low Flow Faucet	0.5
Bathroom Faucet	1
Kitchen Faucet	1.5
Shower	2
Dishwasher	2
Washing Machine	3

Flow rates may vary.



Flow Rate Capacity Table by Zone (Gallons Per Minute - GPM)

Use the U.S. Ground Water Temperature Map to locate your zone. Then use the Flow Rate Capacity Table to determine model flow rate by zone. Flow rates calculated for tankless set temperature of 120°F with a mixed shower temperature of 105°F. Ground water temperatures vary seasonally.

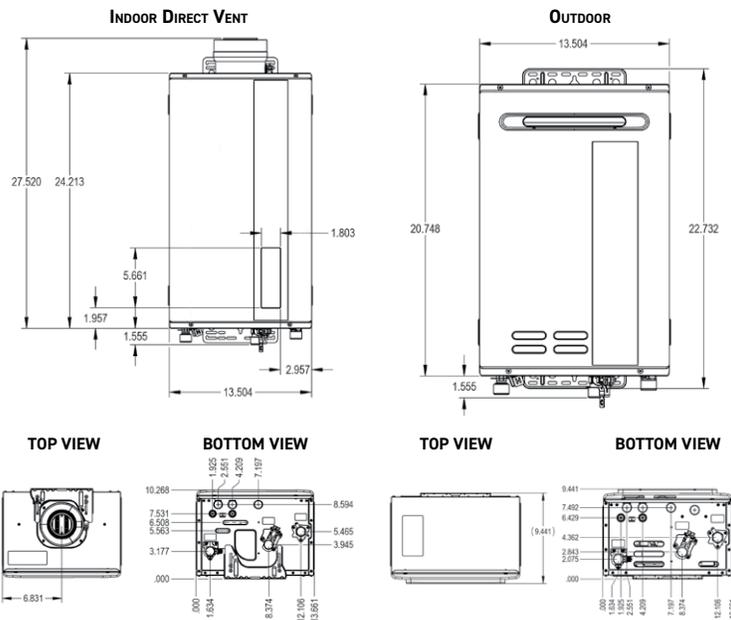
MODEL #	Zone 1 37°F	Zone 2 42°F	Zone 3 47°F	Zone 4 52°F	Zone 5 57°F	Zone 6 62°F	Zone 7 67°F	Zone 8 72°F	Zone 9 77°F
FDTG-95/FDTG-R95	4.0	4.3	4.6	4.9	5.3	5.7	6.3	6.9	7.7
FDTG-84	3.6	3.8	4.1	4.4	4.8	5.2	5.7	6.3	7.0
FDTG-70/FDTG-R70	3.2	3.4	3.7	3.9	4.2	4.6	5.0	5.6	6.2

FRIEDRICH® FDTG/FDTG-R SERIES TANKLESS SPECIFICATIONS

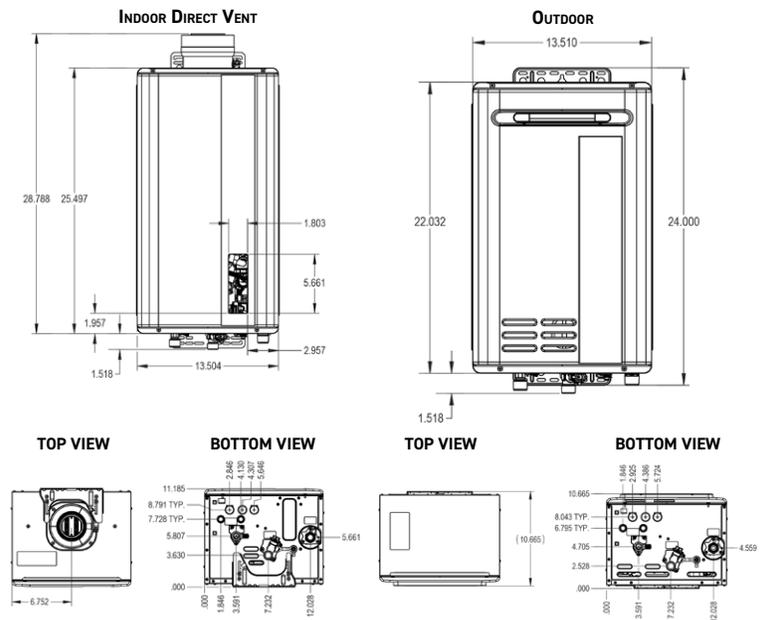
Installation Type		Indoor						Outdoor					
Model Number		FDTG-70 DVLN-3	FDTG-84 DVLN-3	FDTG-95 DVLN-3	FDTG-95 DVELN-3	FDTG-R70 DVELN-3	FDTG-R95 DVELN-3	FDTG-70 XLN-3	FDTG-84 XLN-3	FDTG-95 XLN-3	FDTG-95 XELN-3	FDTG-R70 XELN-3	FDTG-R95 XELN-3
Gas Input Rate	MAX	160,000 BTU/h	180,000 BTU/h	199,900 BTU/h	199,900 BTU/h	160,000 BTU/h	199,900 BTU/h	160,000 BTU/h	180,000 BTU/h	199,900 BTU/h	199,900 BTU/h	160,000 BTU/h	199,900 BTU/h
	MIN	11,000 BTU/h	11,000 BTU/h	11,000 BTU/h	11,000 BTU/h	11,000 BTU/h	11,000 BTU/h	11,000 BTU/h	11,000 BTU/h	11,000 BTU/h	11,000 BTU/h	11,000 BTU/h	11,000 BTU/h
Built-in Recirculation		Sold Separately				✓	✓	Sold Separately				✓	✓
Wi-Fi					✓	✓	✓				✓	✓	✓
Built-in LeakGuard™					✓	✓	✓						
Uniform Energy Factor (UEF)		0.82											
Gallons Per Minute (GPM)	MAX (35°F)	7.0	8.4	9.5		7.0	9.5	7.0	8.4	9.5		7.0	9.5
	45°F Rise	6.0	6.7	7.4		6.0	7.4	6.0	6.7	7.4		6.0	7.4
	67°F Rise	4.5	5.1	5.0		4.5	5.0	4.5	5.1	5.0		4.5	5.0
Number of Bathrooms		2.5	3	3.5		2.5	3.5	2.5	3	3.5		2.5	3.5
Temp. Range		100°F-140°F											
Height		24.2"			25.5"			20.75"			22.03"		
Width		13.5"			13.5"			13.5"			13.5"		
Depth		10.27"			11.2"			9.4"			10.7"		
Weight (Lbs.)		46.5			53			42			47		
Temp. Setting from Factory		120°F											
Heat Exchanger Material		Copper											
Minimum Activation Flow		0.4 GPM											
Minimum Continuous Flow		0.26 GPM											
Manifold Controls (max. units)		6 Units ²											
Maximum Altitude		7,800 ft.			10,200 ft.			7,800 ft.			10,200 ft.		
Ultra Low NOx		Meets 14 ng/J NOx requirements – SCAQMD Rule 1146.2 compliant											
Warranty		15-Year Heat Exchanger 5-Year Parts 1-Year Labor											

ALL MODELS ARE AVAILABLE IN NATURAL GAS OR PROPANE (LP). FOR PROPANE REPLACE THE N WITH P FOR LP MODEL. ² MANIFOLDS WITH STANDARD RJ11 COMMUNICATION CABLES.

FRIEDRICH® FDTG SERIES



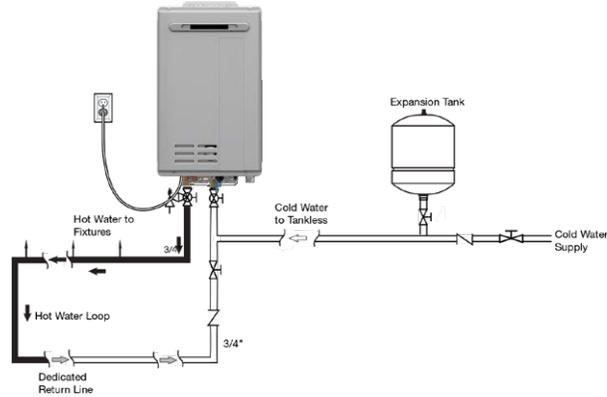
FRIEDRICH® FDTG-R SERIES WITH RECIRCULATION



Clearances	
Top / Bottom	12"
Front	1/2" ⁵
Sides	1/2"
Back / From Vent Pipe	0"

Ease of Installation

Dedicated Return Line or Crossover Valve



Venting

Single Unit Max. Equivalent Vent Lengths - Straight Pipe	
Number of 90° Elbows	Max Length 3" / 5" straight pipe
0	43 ft. (13.1 m)
1	41.5 ft. (12.6 m)
2	38.5 ft. (12.2 m)
3	34 ft. (11.7 m)
4	28 ft. (11.3 m)
5	20.5 ft. (10.8 m)
6	11.5 ft. (10.4 m)

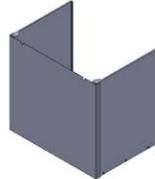
Equivalent Ft. of Elbows	
	3" / 5"
90° Elbow	1.6 ft.
45° Elbow	9 in.

Min. Vent Length Straight Pipe	
Number of 90° Elbows	Min. Length 3" / 5" pipe
1	1.0 ft (0.3 m)

Venting Materials Allowed: 3-in./5-in. (7.6-cm/12.7-cm) UL-approved Category III Stainless Steel vent materials or water heater manufacturer-approved vent material (Metal Fab, ProTech® and UBBINK)

Hanging bracket is included with water heater.

Parts & Accessories

Recirculation Pump	Pipe Cover Recirculating Model	Pipe Cover	ProTech Concentric Vent Horizontal Termination Kit (5 in. Wall Thickness)	ProTech Concentric Vent Vertical Termination Kit	AllClear® Water Treatment System	Isolation Valve Kit	Manifold Cables
AP17920	RTG20367	RTG20330AJ	RTG20281-1	RTG20282	RTG20251	RTG20326	RCPN-AMP03-0013111101-0003 (48")
							

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

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