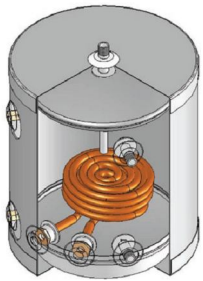


Drain Back Tank

Product Specifications Sheet

The Drain Back Tank is designed to protect the system from both freezing and overheating by allowing solar collectors to drain all heat transfer fluid into the drain back tank reservoir. The Drain Back Tank comes with an internal heat exchanger for use with a storage tank or without a heat exchanger for use with a tank with an internal heat exchanger or plate frame heat exchanger.

Drain back systems are a smart choice when designing a solar thermal system to supplement central heating and domestic hot water heating when overheating during the warmer months is a problem. Drain back systems have less components, than pressurized glycol systems, which reduces maintenance.



Solar Skies Drainback
Tank w/ Heat Exchanger



Solar Skies Drainback
Tank w/o Heat Exchanger

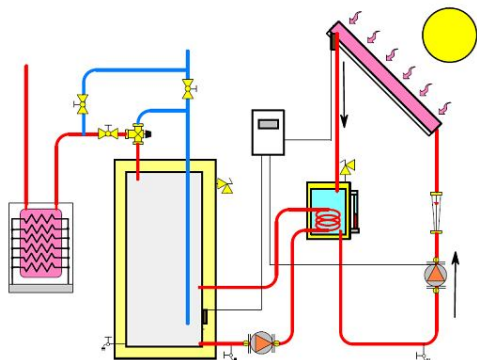
Drain Back Features

- Tank constructed of durable 304 stainless steel
- Plastic Jacket will not dent
- Lightweight construction
- Maintenance free operation
- 5 year warranty against leaks
- Available with or without heat exchange
- Highly efficient Copper Heat Exchanger w/ large surface area
- Site Glass to monitor water level
- Internal dip tube enhance heat exchange performance

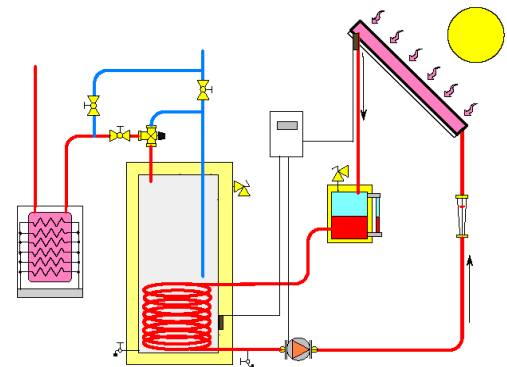
How the Drain Back Tank Works

There are two sensors that are connected to the solar control – one on collector and the other inside of the storage tank. The sensors monitor the temperature differential between the collector and the storage tank. Once the programmed differential is reached, the pump is activated and starts circulating heat transfer fluid from the drain back tank reservoir into the solar collector to begin absorbing the sun's energy. The control will deactivate the circulator pump when the temperature difference drops below the programmed set point.

The drain back tank is used in a closed loop system where the heat transfer fluid is only introduced when commissioning the system. When the circulator shuts down, all the heat transfer fluid drains back into the drain back tank reservoir so any exposed piping or system components will not freeze or overheat. To assure all water (or HTF) has drained from the system, drain back tanks are equipped with a site glass to determine water (or HTF) level inside the tank.



Drain Back Tank Application w/Heat Exchanger



Drain Back Tank w/o Heat Exchanger

Solar Skies Mfg, LLC

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Drainback Tank Weights and Dimensions

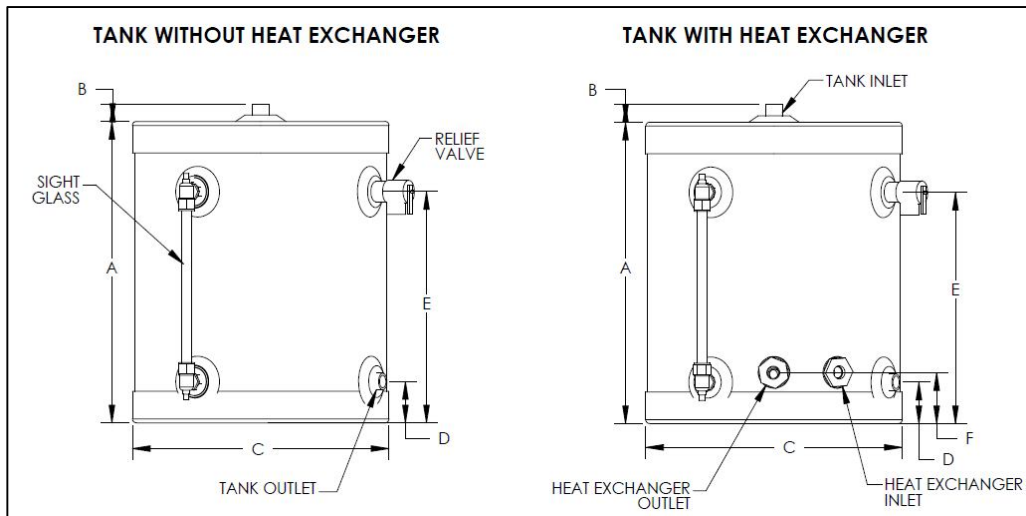
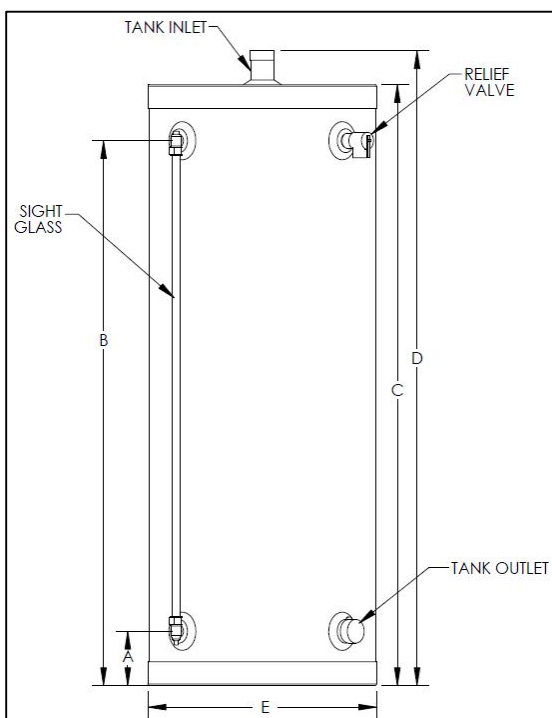


Figure 1 – Drain Back Tank Specifications and Dimensions

MODEL #	GAL.	A	B	C	D	E	F
915-001	10	19"	1 1/4"	19 1/4"	5"	15"	N/A
915-002	15	23"	1"	19 1/4"	4 1/2"	17"	N/A
915-003	20	28"	1 1/2"	19 1/4"	4 1/2"	21 3/4"	N/A
915-007 w/HX	10	19"	1"	19 1/4"	2 1/2"	14 1/2"	3 1/2"
915-008 w/HX	15	23"	1"	19 1/4"	4 1/2"	17"	4 1/4"
915-009 w/HX	20	28"	1 1/2"	19 1/4"	4 1/2"	21 3/4"	4 1/2"

MODEL #	TANK INLET	TANK OUTLET	HX PORT SIZE	SHIPPING WEIGHT
915-001	3/4"	3/4"	N/A	31 lbs.
915-002	3/4"	3/4"	N/A	33 lbs.
915-003	1"	1"	N/A	37 lbs.
915-007	3/4"	3/4"	1/2"	39.7 lbs.
915-008	3/4"	3/4"	1/2"	47.5 lbs.
915-009	1"	1"	1/2"	54.1 lbs.



MODEL #	GAL.	A	B	C	D	E
915-004	30	4 1/2"	33 3/4"	39 1/2"	42 1/2"	19 1/4"
915-022	45	4 1/2"	45 5/8"	51 7/8"	53 3/4"	19 1/4"
915-023	60	4 3/4"	46 1/4"	52 1/8"	53 1/2"	23 1/4"

MODEL #	TANK INLET	TANK OUTLET	SHIPPING WEIGHT
915-004	1"	1"	49 lbs.
915-022	1 1/2"	1 1/2"	61 lbs.
915-023	1 1/2"	1 1/2"	89 1/2 lbs.

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