

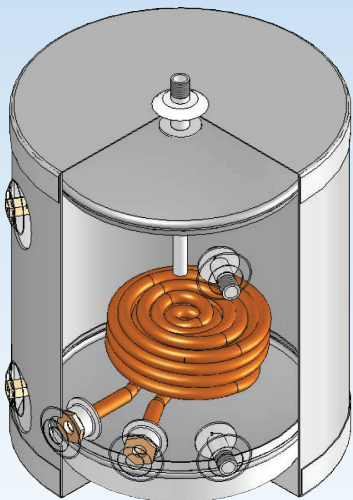


**Advanced Heating &
Hot Water Systems**

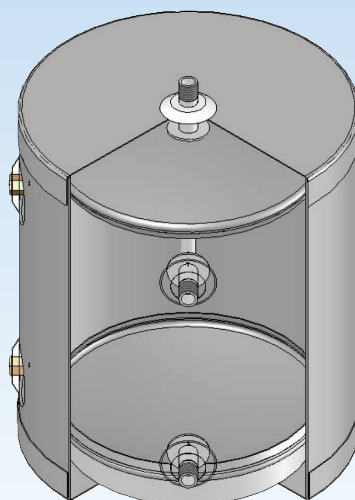
DRAIN BACK TANK

316L Stainless Steel Tank

The **Drain Back Tank** is designed to allow the solar collectors to drain all the water from collector and related pipe connections into the drain back tank reservoir to protect the system from both freezing and overheating. The Drain Back Tank comes with either an internal heat exchanger for use with a storage tank or without a heat exchanger to be connected to 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, so maintenance is reduced, compared to a pressurized glycol system. Drain back systems also provide protection where water quality may be a problem.



SSU-DBX with Heat Exchanger



SSU-DB without Heat Exchanger

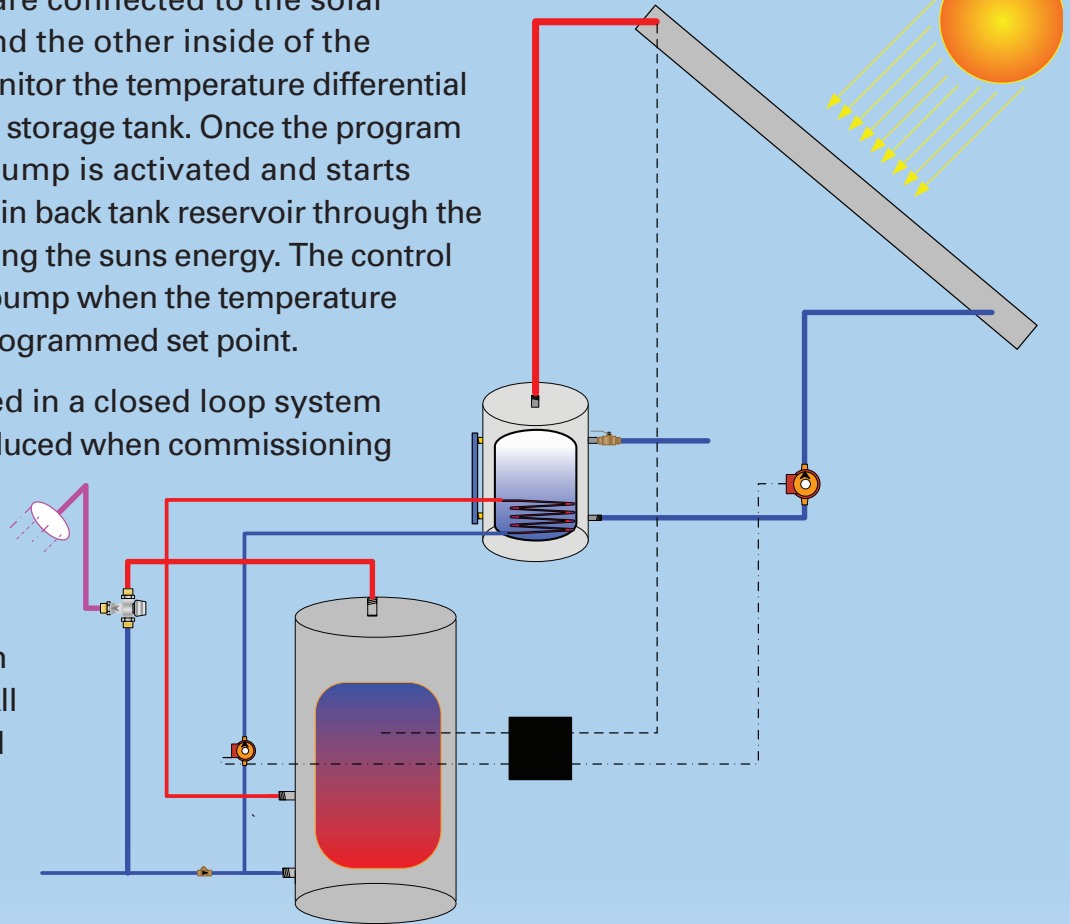
Drain Back Features

- Tank constructed of durable **316L stainless steel**
- Plastic Jacket will not dent
- Light weight construction
- Maintenance free operation
- 5 year warranty against leaks
- Available with or without heat exchanger
- Highly efficient Copper Heat Exchanger with large surface area
- Site Glass to monitor water level
- Internal dip tube enhance heat exchanger performance

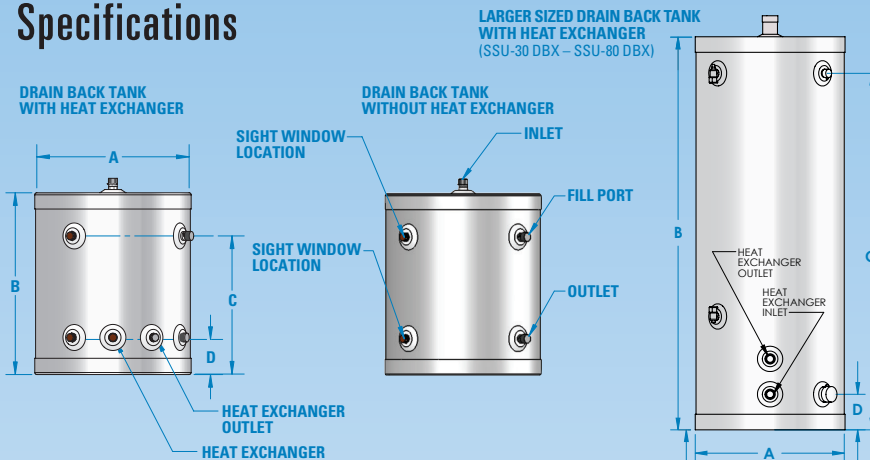
How the Drain Back Tank works

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 program differential is reached, the pump is activated and starts circulating water from the drain back tank reservoir through the solar collector to start 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 system is used in a closed loop system where the water is only introduced when commissioning the system. When the circulator shuts down, all the water must drain back into the tank reservoir so any exposed piping or system components will not freeze. All drain back tanks are equipped with a sight glass to determine water level inside the tank.



Specifications



Model	A	B	C	D	Inlet/Outlet	Capacity	Heat Hx	Ship. Weight	Total Tank Vol W/ HX	Useable Tank Vol Above Internal HX
SSU-10 DB	19.25	20.00	15.00	4.50	3/4" NPT	10 Gal	N/A	31 lbs.	—	—
SSU-10 DBX	19.25	20.00	15.00	4.50	3/4" NPT	10 Gal	10 Sq. Ft.	39.7 lbs.	12 Gal	7.8 Gal
SSU-15 DB	19.25	22.00	17.00	4.50	3/4" NPT	15 Gal	N/A	33 lbs.	—	—
SSU-15 DBX	19.25	22.00	17.00	4.50	3/4" NPT	15 Gal	15 Sq. Ft.	47.5 lbs.	14.1 Gal	9.8 Gal
SSU-20 DB	19.25	27.00	21.75	4.50	1" NPT	20 Gal	N/A	37 lbs.	—	—
SSU-20 DBX	19.25	27.00	21.75	4.50	1" NPT	20 Gal	20 Sq. Ft.	54.1 lbs.	17.8 Gal	13.5 Gal
SSU-30 DB	19.25	39.50	33.75	4.50	1" NPT	30 Gal	N/A	49 lbs.	—	—
SSU-30 DBX	19.25	39.50	33.75	4.50	1" NPT	30 Gal	20 Sq. Ft.	75 lbs.	23.4 Gal	18.8 Gal
SSU-40 DB	19.25	51.875	46	4.50	1.5" NPT	40 Gal	N/A	61 lbs.	—	—
SSU-40 DBX	19.25	51.875	46	4.50	1.5" NPT	40 Gal	20 Sq. Ft.	84 lbs.	32.8 Gal	28.3 Gal
SSU-60 DB	23.25	52.125	46.25	4.50	1.5" NPT	60 Gal	N/A	90 lbs.	—	—
SSU-60 DBX	23.25	52.125	46.25	4.50	1.5" NPT	60 Gal	20 Sq. Ft.	116 lbs.	51.9 Gal	44.2 Gal
SSU-80 DB	23.25	71.5	65.5	4.50	1.5" NPT	80 Gal	N/A	125 lbs.	—	—
SSU-80 DBX	23.25	71.5	65.5	4.50	1.5" NPT	80 Gal	40 Sq. Ft.	151 lbs.	74.4 Gal	68 Gal

Drain Back Application with Heat Exchanger

Drain Back Tank without Heat Exchanger

